

Sequence 58, Appl  
Sequence 1, Appli  
Sequence 1, Appli  
Sequence 792, App  
Sequence 135, Appl  
Sequence 1447, App  
Sequence 21, Appl  
Sequence 1, Appli  
Sequence 1, Appli  
Sequence 56, Appl  
Sequence 344, App  
Sequence 5, Appli  
Sequence 5, Appli  
Sequence 5, Appli

4 US-09-601-198-58  
2 US-08-446-855A-1  
3 US-09-150-741-1  
4 US-09-540-236-792  
4 US-09-596-002-14  
4 US-09-601-198-135  
4 US-09-134-001C-1447  
4 US-09-601-198-60  
4 US-09-627-122-21  
4 US-08-323-170B-1  
4 US-08-954-441-1  
4 US-08-998-416-224  
4 US-08-916-421A-1  
4 US-08-961-527-344  
4 US-08-480-604A-5  
4 US-08-405-496A-5  
4 US-08-915-136-5

3.9 3312  
3.8 8920  
3.8 8920  
3.8 1482  
3.8 19619  
3.8 699  
3.8 1374  
3.8 15016  
3.8 5340  
3.7 9636  
3.7 9636  
3.6 782  
3.6 14086  
3.6 1664976  
3.6 520  
3.5 8133  
3.5 8133  
3.5 8133

ALIGNMENTS

RESULT 1

US-08-956-171E-392  
Sequence 392, Application US/08956171E  
Patent No. 6593114  
GENERAL INFORMATION:  
APPLICANT: Charles Kunsch  
Gil H. Choi  
Patrick S. Dillon  
Craig A. Rosen  
Steven C. Barash  
Michael R. Fannon  
TITLE OF INVENTION: Staphylococcus aureus Polynucleotides and Sequences  
NUMBER OF SEQUENCES: 5256  
CORRESPONDENCE ADDRESS:  
ADDRESSER: Human Genome Sciences, Inc.  
STREET: 9410 Key West Avenue  
CITY: Rockville  
STATE: Maryland  
COUNTRY: USA  
ZIP: 20850

COMPUTER READABLE FORM:  
MEDIUM TYPE: Diskette, 3.50 inch, 1.4mb storage  
COMPUTER: HP Vectra 486/33  
OPERATING SYSTEM: MSDOS version 6.2  
SOFTWARE: ASCII Text  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/956.171E  
FILING DATE: 20-Oct-1997  
CLASSIFICATION: <Unknown>  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 60/009,861  
FILING DATE: January 5, 1996  
APPLICATION NUMBER: 08/781,986  
FILING DATE: January 3, 1997  
ATTORNEY/AGENT INFORMATION:  
NAME: Mark J. Hyman  
REGISTRATION NUMBER: 46,789  
REFERENCE/DOCKET NUMBER: PB248P1  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (240) 314-1224  
TELEFAX: (301) 309-8439  
INFORMATION FOR SEQ ID NO: 392:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 2424 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: double  
TOPOLOGY: linear  
SEQUENCE DESCRIPTION: SEQ ID NO: 392:  
US-08-956-171E-392

GenCore version 5.1.6  
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OM nucleic - nucleic search, using sw model

Run on: June 25, 2004, 11:23:56 ; Search time 113 Seconds  
(Without alignments)  
6634.855 Million cell updates/sec

Title: US-09-103-287-1  
Perfect score: 1351  
Sequence: 1 atagagtaaggagttttatat.....ttaatatgtttataatagag 1351

Scoring table: IDENTITY NUC  
Gapop 10.0 , Gapext 1.0

Searched: 682709 seqs, 277475446 residues 1365418  
Total number of hits satisfying chosen parameters:

Minimum DB seq length: 0  
Maximum DB seq length: 2000000000  
Post-processing: Minimum Match 3%  
Maximum Match 100%  
Listing first 45 summaries

Database : Issued Patents NA.\*  
1: /cgm2\_6/ptodata/2/ina/5A.COMB.seq.\*  
2: /cgm2\_6/ptodata/2/ina/5B.COMB.seq.\*  
3: /cgm2\_6/ptodata/2/ina/6A.COMB.seq.\*  
4: /cgm2\_6/ptodata/2/ina/6B.COMB.seq.\*  
5: /cgm2\_6/ptodata/2/ina/PTC.COMB.seq.\*  
6: /cgm2\_6/ptodata/2/ina/backfiles1.seq.\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	1330.2	98.5	2424	US-08-956-171E-392	Sequence 392, App
2	913.4	67.6	1329	US-09-134-001C-2296	Sequence 2296, Ap
3	599.2	44.4	619	US-08-936-165A-179	Sequence 179, App
4	397.6	29.4	11864	US-08-961-527-61	Sequence 61, Appl
5	396	29.3	2715	US-08-940-572-1	Sequence 1, Appli
6	389.6	28.8	888	US-08-714-918-61	Sequence 61, Appl
7	389.6	28.8	888	US-09-265-315-61	Sequence 61, Appl
8	389.6	28.8	888	US-09-265-315-61	Sequence 61, Appl
9	389.6	28.8	888	US-09-266-417-61	Sequence 61, Appl
10	389.6	28.8	888	US-09-528-709-61	Sequence 61, Appl
11	367	27.2	1267	US-09-527-745-61	Sequence 115, App
12	367	27.2	1267	US-08-961-083-115	Sequence 115, App
13	367	27.2	1267	US-09-536-784-115	Sequence 3260, Ap
14	350.8	26.0	1873	US-08-107-532A-3260	Sequence 3, Appli
15	308.8	22.9	1825	US-08-940-572-3	Sequence 897, App
16	133.8	9.9	1479	US-09-328-352-897	Sequence 1, Appli
17	100.4	7.4	640681	US-09-790-988-1	Sequence 2779, Ap
18	82.8	6.1	1467	US-09-543-681A-2779	Sequence 1, Appli
19	78.2	5.8	1830121	US-09-557-884-1	Sequence 1, Appli
20	78.2	5.8	1830121	US-09-643-990A-1	Sequence 1, Appli
21	78	5.8	1230025	US-09-198-452A-1	Sequence 2, Appli
22	68	5.0	5361	US-08-973-462-2	Sequence 1, Appli
23	68	5.0	6152	US-08-973-462-1	Sequence 4, Appli
24	57	4.2	2223	US-08-257-073-4	Sequence 1, Appli
25	54.2	4.0	1830121	US-09-557-884-1	Sequence 1, Appli
26	54.2	4.0	1830121	US-09-643-990A-1	Sequence 1, Appli
27	54	4.0	1485	US-09-543-681A-501	Sequence 601, App

Query Match 98.5%; Score 1330.2; DB 4; Length 2424;  
 Best Local Similarity 99.0%; E-val. No. 1.1e-304;  
 Matches 1338; Conservative 0; Mismatches 13; Indels 0; Gaps 0;

QY 1 ATGAGTAAGGAGTTTATATATATAGACACACTATCATTTTGTGCGAATTAAGGTTCTGCG 60  
 DB 606 AAGGTAAGGAGTTTATATATATAGACACACTATCATTTTGTGCGAATTAAGGTTCTGCG 665  
 QY 61 ATGAGTTTATAGACACAAATCATGATGATTTAGGACATGAAGTTCAAGGATCGGATATT 120  
 DB 666 ATGAGTTTATAGACACAAATCATGATGATTTAGGACATGAAGTTCAAGGATCGGATATT 725  
 QY 121 GAGAACTAGCTATTTACAGAGTTGCTCTTAGAANTAAAGGGATAAAAATATTACCATTT 180  
 DB 726 GAGAACTAGCTATTTACAGAGTTGCTCTTAGAANTAAAGGGATAAAAATATTACCATTT 785  
 QY 181 GGTGCTTAATACMAAAGAGATAGTTAGTTATACAGGTAATGCAATTCGCGAGTAGC 240  
 DB 786 GATGCTTAATACMAAAGAGATAGTTAGTTATACAGGTAATGCAATTCGCGAGTAGC 845  
 QY 241 CATGAAGAAATAGTACGTCGACATCAATCAAAATTAGATCTTGTAGTTATATATGATTTT 300  
 DB 846 CATGAAGAAATAGTACGTCGACATCAATCAAAATTAGATCTTGTAGTTATATATGATTTT 905  
 QY 301 TTAGGACAGATTAATGATCAATATACCTAGTGTGTAATCGTGTGACATGTTAAACT 360  
 DB 906 TTAGGACAGATTAATGATCAATATACCTAGTGTGTAATCGTGTGACATGTTAAACT 965  
 QY 361 TCTACACAGCTTTATATACATGTTTATCAAGTGTGATGATGATGATGATGATGATGATG 420  
 DB 966 TCTACACAGCTTTATATACATGTTTATCAAGTGTGATGATGATGATGATGATGATGATG 1025  
 QY 421 GGTGATGACAGATGAGTATGATGATGATGATGATGATGATGATGATGATGATGATGATG 480  
 DB 1026 GGTGATGACAGATGAGTATGATGATGATGATGATGATGATGATGATGATGATGATGATG 1085  
 QY 481 ATATAGAGTCACTTTTAAAGTATTAACCTGATTAACCTGATTAACCTGATTAACCTGATTA 540  
 DB 1086 ATATAGAGTCACTTTTAAAGTATTAACCTGATTAACCTGATTAACCTGATTAACCTGATTA 1145  
 QY 541 GATCATCTGATTAATCAAGATATTAATGATGATGATGATGATGATGATGATGATGATGATG 600  
 DB 1146 GATCATCTGATTAATCAAGATATTAATGATGATGATGATGATGATGATGATGATGATGATG 1205  
 QY 601 CATATGTTTAAAAAGGATTAATGATGATGATGATGATGATGATGATGATGATGATGATGATG 660  
 DB 1206 CATATGTTTAAAAAGGATTAATGATGATGATGATGATGATGATGATGATGATGATGATGATG 1265  
 QY 661 GCGATGTTCCAAATTTATATGATGATGATGATGATGATGATGATGATGATGATGATGATG 720  
 DB 1266 GCGATGTTCCAAATTTATATGATGATGATGATGATGATGATGATGATGATGATGATGATG 1325  
 QY 721 ATTCAAACTACGGATTAAGGATTAATGATGATGATGATGATGATGATGATGATGATGATGATG 780  
 DB 1326 ATTCAAACTACGGATTAAGGATTAATGATGATGATGATGATGATGATGATGATGATGATGATG 1385  
 QY 781 CACTTCCTGCTCCCAATATGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 840  
 DB 1386 CACTTCCTGCTCCCAATATGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 1445  
 QY 841 ATTAGTTTATTAGAGAGCTAGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 900  
 DB 1446 ATTAGTTTATTAGAGAGCTAGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 1505  
 QY 901 GGTGTTAAAGCTGCTTCAATGAAATCAATGCAATGCAATGCAATGCAATGCAATGCAATGCAAT 960  
 DB 1506 GGTGTTAAAGCTGCTTCAATGAAATCAATGCAATGCAATGCAATGCAATGCAATGCAATGCAAT 1565  
 QY 961 GCACACCATCCAGAGAAATTAGTGTCAATTTGACACAGCAGCAGCAGCAGCAGCAGCAGCAGC 1020  
 DB 1566 GCACACCATCCAGAGAAATTAGTGTCAATTTGAAACAGCAGCAGCAGCAGCAGCAGCAGCAGC 1625  
 QY 1021 AAAAGAGTTGTTGCGATTTTCAACACACACTTTCTAGAACACACAGCAATTTTAAAT 1080

RESULT 2

US-09-134-001C-2296  
 ; Sequence 2296, Application US/09134001C  
 ; Patent No. 6380370  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Lynn Doucette-Stamm et al.  
 ; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO STAPHYLOCOCCUS  
 ; TITLE OF INVENTION: EPIDERMIDIS FOR DIAGNOSTICS AND THERAPEUTICS  
 ; FILE REFERENCE: GTC-007  
 ; CURRENT APPLICATION NUMBER: US/09/134,001C  
 ; CURRENT FILING DATE: 1998-08-13  
 ; PRIOR FILING DATE: 1998-08-13  
 ; PRIOR FILING DATE: 1997-11-08  
 ; PRIOR APPLICATION NUMBER: US 60/055,779  
 ; PRIOR FILING DATE: 1997-08-14  
 ; NUMBER OF SEQ ID NOS: 5674  
 ; SEQ ID NO 2296  
 ; LENGTH: 1329  
 ; TYPE: DNA  
 ; ORGANISM: Staphylococcus epidermidis  
 US-09-134-001C-2296

Query Match: 67.6%; Score 913.4; DB 4; Length 1329;  
 Best Local Similarity 80.9%; E-val. No. 1.8e-206;  
 Matches 1064; Conservative 0; Mismatches 251; Indels 0; Gaps 0;

QY 21 AATGACACACTATCATTTTGTGCGAATTAAGGTTCTGCGATGAGTTTCAATTAGCACAAT 80  
 DB 15 AATGACACACTATCATTTTGTGCGAATTAAGGTTCTGCGATGAGTTTCAATTAGCACAAT 74  
 QY 81 CATGCACTATTAGGACATGAAGTTCAAGGATCGGATTTGAGAACTAGTATTACAGA 140  
 DB 75 CATGCACTGACCTCGTCTCATGAAGTCAAGGTTCAAGGATCGGATTTGAGAACTAGTATTACAGA 134  
 QY 141 AGTTGCTCTTAGAATTAAGGATTAAGGATTAAGGATTAAGGATTAAGGATTAAGGATTAAGG 200  
 DB 135 AGTTGCTCTTAGAATTAAGGATTAAGGATTAAGGATTAAGGATTAAGGATTAAGGATTAAGG 194  
 QY 201 AGATATGTTAGTTATACAGGATTAAGGATTAAGGATTAAGGATTAAGGATTAAGGATTAAGG 260  
 DB 195 AGAATGTTGTTCACTCCAGGTTAAGGATTAAGGATTAAGGATTAAGGATTAAGGATTAAGG 254  
 QY 261 ACATCAATGAATTAAGGATTAAGGATTAAGGATTAAGGATTAAGGATTAAGGATTAAGGATTA 320  
 DB 255 ACATCAATGAATTAAGGATTAAGGATTAAGGATTAAGGATTAAGGATTAAGGATTAAGGATTA 314  
 QY 321 ATATACCTCAGTGTGTTAGGATTAAGGATTAAGGATTAAGGATTAAGGATTAAGGATTAAGG 380  
 DB 315 ATATACCTCAGTGTGTTAGGATTAAGGATTAAGGATTAAGGATTAAGGATTAAGGATTAAGG 374

[illegible]

RESULT 3  
US-08-936-165A-179/c  
; Sequence 179, Application US/08936165A  
; Patent No. 6348592  
; GENERAL INFORMATION:  
; APPLICANT: Black, Michael  
; APPLICANT: Burnham, Martin

Db 316 TATTCAACACACACTTTCTCTAGAACACAAGCAATTTTAAATGAAATTTGCAGAAAGTT 257  
QY 1097 TATGTAAGCAGATCGTGTATCTTATGCGAAATTTTGGCTCAATTTAGAGAAATCTG 1156  
Db 256 TATGTAAGCAGATCGTGTATCTTATGCGAAATTTTGGCTCAATTTAGAGAAATCTG 197  
QY 1157 GCGCATTAACGATACAGATTTAATTTGATAAAATTTGGAGTGCATCGTTCATTAAATGAG 1216  
Db 196 GCGCATTAACGATACAGATTTAATTTGATAAAATTTGGAGTGCATCGTTCATTAAATGAG 137  
QY 1217 A-TCTTATTAATGATTAGAACAAATTTGATAAATGCTGTTTATTTATGSGTGCAGGT 1275  
Db 136 ATTCTTATTAATGATTAGAACAAATTTGATAAATGCTGTTTATTTATGSGTGCAGGT 77  
QY 1276 GATATTCAAAATTTACAAATGATATTTAGATAAATTTAGCATGAAATGCGTTTAA 1335  
Db 76 GATATTCAAAATTTACAAATGATATTTAGATAAATTTAGCATGAAATGCGTTTAA 17  
QY 1336 TATGTTTATTAATAGAG 1351  
Db 16 TATGTTTATTAATAGAG 1

## RESULT 4

US-08-961-527-61/c  
; Sequence 61, Application US/08961527  
; Patent No. 6420135  
; GENERAL INFORMATION:  
; APPLICANT: Charles Kunsch  
; TITLE OF INVENTION: Streptococcus pneumoniae Polynucleotides and Sequences  
; NUMBER OF SEQUENCES: 391  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Human Genome Sciences, Inc.  
; STREET: 9410 Key West Avenue  
; CITY: Rockville  
; STATE: Maryland  
; COUNTRY: USA  
; ZIP: 20850  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Diskette, 3.50 inch, 1.4Mb storage  
; COMPUTER: HP Vectra 486/33  
; OPERATING SYSTEM: MSDOS version 6.2  
; SOFTWARE: ASCII Text  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/961,527  
; FILING DATE:  
; CLASSIFICATION: 424  
; PRIOR APPLICATION NUMBER:  
; FILING DATE:  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Brookes, A. Anders  
; REGISTRATION NUMBER: 36,373  
; REFERENCE/DOCKET NUMBER: PB340P1  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (301) 309-8504  
; TELEFAX: (301) 309-8512  
; INFORMATION FOR SEQ ID NO: 61:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 11864 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: double  
; TOPOLOGY: linear  
US-08-961-527-61

Query Match 29.4%; Score 397.6; DB 4; Length 11864;  
Best Local Similarity 59.0%; Pred. No. 1.7e-84;  
Matches 758; Conservative 0; Mismatches 514; Indels 12; Gaps 4;  
QY 31 TATCAATTTGCGGAATTAAGGTTCTGGCATGAGTTCAATTAGCACAAATCATGCAATGAT 90  
Db 1749 TATCAATTTATCGGAATTAAGGATCAGGATGAGTGGCTTGGCTTGAATGTTGCCAG 1690

QY 91 TTAGGACATGAAGTTCAAGGATCGGATTAATGAGAACTACGTAATTTACAGAAAGTTGCTT 150  
Db 1689 ATGGGGCACAGGTTCAAGGATCAGATGTTGAAAGTACTACTTTTACCAACGGGCTT 1630  
QY 151 AGAAATGAAGGATTAAGAAATTAATACCAATTTGGTCTTAATACATTAAGAAAGATACGTA 210  
Db 1629 GAGCAGGACGGAATTAACCATTTCTCCCTTTGATGAAAAAATCTAGACGGTATACGAA 1570  
QY 211 GTTATACAAGGTAATGCAATTT---CGCGAGTAGCCATGAAGAAATAGTAGTGCACATCAA 267  
Db 1569 ATTATCGCTGGAATGCTTTGCTCCAGATTAACAACGTCGAAATGCTATGCGGACAA 1510  
QY 268 TTGAAATAGATGTTGTAAGTTATAATGATTTTATGAGTGTGAGTGTGATGATCAATTA 327  
Db 1509 AATGGTATCAGCTACAAACGTTACCATGATTTCTAGGTAGTCTTTATGCGTGACTTGT 1450  
QY 328 TCAGTAGCTGTAACTGGTGACATGTAATAACTTCTACAACAGGTTTATTAATCAATGTT 387  
Db 1449 AGCATGGAGTAGCAGGAGCACATGGAAATCTTCAAGCAGAGTATGTTGTCTCATGTC 1390  
QY 388 ATGAATGGTGATAAAAAGACTTCAATTTTAAATGGTGATGGCACAGGTATGGATGCT 447  
Db 1389 TTGTCTCACATTACAGATACCAGCTTCTGATTCGAGATGGACAGGTCGTGTTGCGCC 1330  
QY 448 GAAAGTGAATTTTTCGCTTTTGGAGTGTGAATATAGACGTCACCTTTTAAATTAATAA 507  
Db 1329 AATGCCAAATATTTTGTCTTTTGAATCTGACGAATATGAGCGTCACTTCATGCTTACCAC 1270  
QY 508 CCTGATTACGCAATTAATGACAAATTAATGATTTGATCTGATCTCTGATTTTCAAGATAT 567  
Db 1269 CCAGATCTCTATTAACCAATGACTTTGACCATCCAGATTAATTTTCAAGTCTC 1210  
QY 568 AATGATGTTTTTGTATGCTTCCAAAGAAATGCCAATATGTTTAAAGGTTATTTGCT 627  
Db 1209 GAGGATGTTTTTAAATGCTTTTAAAGCAATATGCCAAACAAATCACCAGGGTCTTTTGT 1150  
QY 628 TGGGATGATGATGAACATCTACGTAATTAATGAAGCAGTGTTCGAATTTTACTATGTA 687  
Db 1149 TATGGTGAAGATGCTGAATTCGTAAGATTAAGTCTGATGACCAATTTATTTATGTT 1090  
QY 688 TTTAAAGATTCGG---ATGACATTTATGCTCAAAATATTTCAAAATTTACGATAAAGTACT 744  
Db 1089 TTTGAAGCTGAAGCAATGACTTTGTAGCTGATGATCTCTTCGTTCAATAACTGTTCA 1030  
QY 745 GCTTTTGTATGATGAGTGGTGAATGATGATCACTTCTGCTCTCCCAATATGTT 804  
Db 1029 ACCITCACCGTTCAATTTCCGTGGCAAAATTTGGGCAATTTCCCAATTTCCAACTTGGT 970  
QY 805 GACCATACAGTTTAAATGCAATTAAGTCTTAATTCGATTTAGTTATTTAGAGAGCTAGAT 864  
Db 969 CGTCACAAATATCATGAATGCGACGCGGTTATGTTCTTTTACACAGCAGGATTTGAT 910  
QY 865 GTTACAAATATTAAGAGCAATTAAGAAACGTTTGGTGGTGTAAACGTCGTTTCAATGAA 924  
Db 909 TTGAACITTTGGTGGTGAGCACTTTGAAAACATTTGCGGGTGTAAACGTCGTTTCACTGAG 850  
QY 925 ACTCAATGCAATCAAGTTTATGATGATGATGATGATGATGATGATGATGATGATGATGAT 984  
Db 849 AAAATTTGCAATGATACAGTGAATTTATGATGATGATGATGATGATGATGATGATGATGAT 790  
QY 985 GCTCAATTTGACACAGCAGCAAGAAATATCCACATAAAGAGTTGTTGTCAGTATTTCAA 1044  
Db 789 GCGACCTTTGGATGCGGCTCGTCAGAAATATCCCAAGCAAGAAATTTGATGAGCTCTTCAA 730  
QY 1045 CCACACATTTCTCTAGAACACAAAGCAATTTTAAATGAATTTGCGAGAAAGTTTATGTA 1104  
Db 729 CCGCATACCTTTACAGAAACCATTTGCTTTGTTGGACGACTTTGCGCATGCTTTTAAACCAA 670  
QY 1105 CGAGATCGTATTTCTTATGTAAGTGAATTTTGGTCTCAATAG---AGAAATCTGCGCA 1161  
Db 669 GCAGATGCTGTTTATCTAGCGCAATTTATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 610  
QY 1162 TTAACGATACAGAGTTTAAATTTGATAAAT---TGGAGGTGCATCGTTTCAATTAATGAAGAT 1218

Db 609 GTTAAGTAGAAGACCTAGCCCAAAATCAACAAAAACACCAAGTACTGTGAA 550  
QY 1219 CTTATTAAGTATTAGAACAAATTTGATAATGCTGTGTTTATTTAAGGTGCAAGTAT 1278  
Db 549 AATGTTTCTCCACTCCCTAGACCATGACAAATGCTGTTTACGCTCTTTATGAGGAGGAGAC 490  
QY 1279 ATTCAAAATTAACAAATGCAAT 1302  
Db 489 ATCCAAACCTATGATCTCAATTT 466  
  
RESULT 5  
US-08-940-572-1  
Sequence 1, Application US/08940572  
Patent No. 6310193  
GENERAL INFORMATION:  
APPLICANT: Wallis, Nicola G.  
APPLICANT: Black, Michael T.  
APPLICANT: Hodgson, John E.  
APPLICANT: Knowles, David J.  
APPLICANT: Lonetto, Michael A.  
APPLICANT: Nicholas, Richard O.  
APPLICANT: Stodola, Robert K.  
TITLE OF INVENTION: No. 6310193el Mure  
NUMBER OF SEQUENCES: 6  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Dechert, Price & Rhoads  
STREET: 4000 Bell Atlantic Tower, 1717 Arch Stre  
CITY: Philadelphia  
STATE: PA  
COUNTRY: USA  
ZIP: 19103-2793  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Diskette  
COMPUTER: IBM Compatible  
OPERATING SYSTEM: DOS  
SOFTWARE: FastSeq for Windows Version 2.0  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/940,572  
FILING DATE:  
CLASSIFICATION: 536  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 60/024022  
FILING DATE: 16-AUG-1996  
APPLICATION NUMBER: US 08/889711  
FILING DATE: 08-JUL-1997  
ATTORNEY/AGENT INFORMATION:  
NAME: Dickinson, Q. Todd  
REGISTRATION NUMBER: 28,354  
REFERENCE/DOCKET NUMBER: P50533-04  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 215/994-2252  
TELEFAX: 215/994-2222  
TELEX:  
INFORMATION FOR SEQ ID NO: 1:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 2715 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: double  
TOPOLOGY: linear  
US-08-940-572-1  
Query Match 29.3%; Score 396; DB 4; Length 2715;  
Best Local Similarity 59.0%; Pred. No. 2.6e-84;  
Matches 757; Conservative 0; Mismatches 515; Indels 12; Gaps 4;  
  
QY 31 TATCATTTTGGGAATTAAGGTTCTGGCATGAGTTCAATTAGCACAAATCATGCAATGAT 90  
Db 408 TATCATTTTATCGGAATTAAGGATCGAGGATGAGTGCCTGGCTTGTGATGTTGACAG 467  
QY 91 TTAGCATGAGTTCAAGGATCGGATATTGAGAACTACGTTATTACAGAGTTGCTCTT 150

468 ATGGGSCACAAGGTTCAAGGATCAGATGTTGAAAAGTACTACTTACCACAAAGCGGCTTT 527  
151 AGAAATAAGGGGATAAAAAATATTACCAATTTGGTGGCTTAATTAACATAAAGAGAGATATGTA 210  
528 GAGCAGGCGAGGAATTACCAATTTCTTCTTTTGTGATGAAAAGAACTCTAGACGGTGATATGAA 587  
211 GTTATATCAAGGTAAATGCAAT---CGGAGTAGCCATGAAGAAATAGTACGTCGACATCAA 267  
588 ATTATCGCTGGAAATGCCCTTTTCGTCAGATAAACGTCGAAATGCTATGCGGACCA 647  
268 TTGAATTTAGATGTTGTAAGTTATAATGATTTTATAGACAGATTTATGATCAATATACT 327  
648 AATGGTATCAGCTACAAAAGTTACCATGAGTTTCTAGTAGCTTTATCGGTGACTTTGTT 707  
328 TCAGTAGCTTAACCTGGTGACATGGTAAACCTTCTTACACAGGTTTATTAATCAATGTT 387  
708 AGCATGGGAGTAGCAGGAGCACATGGAAMAACTTCAACAGAGGTATGTTGTTCTCATGTC 767  
388 ATGAATGGTGATAAAGACATTCATTTTATTTGATGTCGATGACAGGTATGCGATGGCT 447  
768 TTGCTCACAATTACAGATACAGGCTTCTTTGATGAGATGGACAGGTGCTGTTGCGGC 827  
448 GAAAGTGATTTTTCGCTTTTGAAGCATGTGAATATAGACGTCCTCTTTTAAAGTTATAAA 507  
828 AATGCCAAATTTTGTCTTTGAACTTGAAGATATGAGCGTCACTTTCATGCTTACCAC 887  
508 CCTGATTACGCAATATGACAAATTTGATTTTGGATTCATCTGATTTTCAAGATATT 567  
888 CCAGATATCTCTATTATCACAACATGACTTTGACCATCCAGATTTATTTCAAGTCTC 947  
568 AATGATGTTTTGATGTCATCCAGAAATGGCACATAATGTTAAAAAGGTTATTTGCT 627  
948 GAGGATGTTTTCAATGSCCTTTAAACGACTATGCCAAACHAATTAACCAAGGCTCTTTTGC 1007  
628 TGGGTGATGATGAACATCTACGTAAATTAAGCAGATGTTCCAAATTTATCTATGGA 687  
1008 TATGGTGAAGATGCTGAATTTGGTAAGATTACGTCGTGATGACCAATTTATTTATGTT 1067  
688 TTTAAAGATTCGG---ATGACATTTATGCTCAAAATATTCAATTAAGGATAAGGTACT 744  
1068 TTTGAAGCTGAAGGCAATGACTTTGTAGTAGTATCTTTCTGTTCAACACTGGTTCA 1127  
745 GCTTTTGTATGTTGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 804  
1128 ACCTTCACCGTTCAATTTCCGTGGACAAAACCTTGGGGAAATCCACATTCACCTTTGTT 1187  
805 GACCATACAGTTTAAATGCAATGATGCTGTAATTCGATTTAGTTATTTAGAGAGCTAGAT 864  
1188 CGTCACATATCATGAATGGACAGCGCTTATTTGTTCTTTTACACAGCAGGATTTGAT 1247  
865 GTTACAAATATTAAAGAACATTAGAAAACGTTTGGTGGTGTAAACGTCCTTTCAATGAA 924  
1248 TTGAACCTTGGTGGTGAGCACTTTGAAAACATTTTGGCGGTGTTAAACGTCGTTTCACTGAG 1307  
925 ACTACAAATTCGAATCAAGTTTATTTAGATGATTTATGACACCAATCCACAGAGAAATAGT 984  
1308 AAAATTTGTCAATGATCAGTGATTTATTTGATGATCTTTGCCCATCATCCACAGAAATATT 1367  
985 GCTACAAATTCACACAGCACGACGAAAGAAATATCCACATAAAGAAAGTTGTTGAGTATTCAA 1044  
1368 GCGACCTTGGATGGGCTCGTCAGAAATACCCAAAGCAAGAAATTTGAGCAGTCTTTCAA 1427  
1045 CCACACATTTCTTAGACACAGCAATTTTAAATGAATTTTAAATGAATTTGAGAAAGTTTATGAAA 1104  
1428 CCGCATACCTTTTACAGAACCAATTTGCCCTGTTGGAAGCTTTTGGCCATGCTTTTAAACCA 1487  
1105 GCAGATCGTGATTTCTTATGTAATTTTGGCTCAATTAG---AGAAAA---TCTGGCGCA 1161  
1488 GCAGATGCTGTTTATCTAGCGCAATTTTATGGCTCGGCTCGTGAAGTAGATCATGTTGAC 1547  
1162 TTAAGGTACAGATTTTAAATTTGATAAAAT---TGGAGGTGATCGTTCATTTAATGAAGAT 1218  
1548 GTTAAGGTAGAGACCTTAGCCAAATTAATCAACAAAAACCAAGTATGTTACTGTTGAA 1607



```

; REGISTRATION NUMBER: 32,327
; REFERENCE/DOCKET NUMBER: 240/247
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (213) 489-1600
; TELEFAX: (213) 955-0440
; TELEX: 67-3510
; INFORMATION FOR SEQ ID NO: 61:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 888 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; US-09-265-315-61

Query Match      28.8%; Score 389.6; DB 3; Length 888;
Best Local Similarity 92.3%; Pred. No. 6e-83;
Matches 468; Conservative 1; Mismatches 31; Indels 7; Gaps 6;

QY      849 TTTAGAAAGCTAGATGTTTCAAAATATTAAAGAGCATTAGAAACGTTTGTCGTCGTTAA 908
Db      888 TTTAGAAAGTTAGATG-TCCCAATNTTAAAGAGCATTAGAAACG-TTGGTGGGTTTAA 831

QY      909 ACGTCGTTTCAATCAAACTCAATTCGCAATCAAGTTATTGTAGATGATTATGCACACCA 968
Db      830 ACGTC-NNTCNATGANACTCAATCGCAATCAAGTTAATGTAGTGAATTTGNACACCA 772

QY      969 TCCAAGAGAATAAGTGCTCAATTTGACACAGCAGCAAGAAATATCCACATAAAGAAGT 1028
Db      771 TCCAAGAGAAANTTAGTGNNCAATTGAAACCGCACGAAAGAAATATCCACATAAAGAAGT 712

QY      1029 TGTTCAGTATTTTC-AAACCACACACTTTCCTAGAACACAGCATTTTTAAATGAATTC 1087
Db      711 TGTTCAGTATNTCAAACCCACACACTTTCCTAGAACACAGGCATTTTTAAATGAATTC 652

QY      1088 CAGAAAGTTAATGAAGCAGATCGTGTAT--CTTATGTGAATTTTTCGCTCAATTAG 1145
Db      651 CAGAAAGTTAAGTAAAGCAGATCGTGTATTC-TTGTGAAATTTTGGATCAATTAG 592

QY      1146 AGAAATTCGCGCATTAACGATACAGATTTAATTGATAAAATTTGAGGTGCATCGTT 1205
Db      591 AGAAATACTCGCGCATTAACGAWACAGATTTAATTGATAAAATTTGAGGTGCATCGTT 532

QY      1206 CATTAAATGAAGATCTTATTAATGTATTAGAACAATTTGATAAATGCTGTGTTTT-ATTTA 1264
Db      531 AATTAAATGAAGATTCATTAAATGATTAGAACAATTTGATAAATGCTGTGTTTTCAATTA 472

QY      1265 TGGGTGCAGGTGATATTCAAAAATTTACAAAATGCAATTTTAGATAAATTAGGCATGAAA 1324
Db      471 TGGGTGCAGGTGAUATTCAAAAATTTACAAAATGCAATTTTAGATAAAATTTAGGCATGAAA 412

QY      1325 ATCGTTTTTAATGTTTATTAATAGAG 1351
Db      411 ATCGTTTTTAATGTTTATTAATAGAG 385

```

RESULT #	US-09-265-315-61/c	Db	711	TGTTGCAGTATNTCAAACCACACACTTCTCTAGAACACAGCATTTTTAAATGAATTTG	652
Sequence 61, Application US/09265315					
Patent No. 6187541		Qy	1088	CAGAAAGTTTATGTTAAAGCAGATCGTGATT--CTTATGTGAAATTTTTGGCTCAATTAG	1145
GENERAL INFORMATION:					
APPLICANT: Benton, Bret		Db	651	CAGAAAGTTTAAAGTAAAGCAGATCGTGATTCTTATTGTGAAATTTTTGGATCAATTAG	592
APPLICANT: Lee, Ving J.					
APPLICANT: Malouin, Francois		Qy	1146	AGAAATTCCTGGCGGANTTAACGATCAACGATTTAATTGATATAAAATTGGAGTGTCATCGTT	1205
APPLICANT: Martin, Patrick K.					
APPLICANT: Schmid, Molly B.		Db	591	AGAAATACCTGGCGCATTAACGAWACAGATTTAATTGTATAAATTGAAGTGTCATCGTT	532
APPLICANT: Sun, Dongxu					
TITLE OF INVENTION: METHODS OF SCREENING FOR COMPOUNDS		Qy	1206	CATTAATGAAGATCTTTAATGTATTAGAACAATTTGATTAATGCTGTGTTTT-ATTTA	1264
TITLE OF INVENTION: ACTIVE ON STAPHYLOCOCCUS AUREUS					
TITLE OF INVENTION: TARGET GENES		Db	531	AAITTAATGAAGATCTCTAATTAATGTATTAGAACAAATTGATAATGCTGTATTATTTCATTTA	472
NUMBER OF SEQUENCES: 111					
CORRESPONDENCE ADDRESS:		Qy	1265	TGGGTCCAGTGTATTTCAAAAATTAACAAAATGATATTAGATAAATTAGGCATGAAAA	1324
ADDRESSEE: Lyon & Lyon					
STREET: 633 West Fifth Street		Db	471	TGGGTCCAGTGTATTTCAAAAATTAACAAAATGATATTAGATAAATTAGGCATGAAAA	412

QY 1325 ATCGTTTAAATGTTTATAATAG 1351  
Db 411 ATGCGTTTAAATGTTTATAATAG 385

## RESULT 9

US-09-266-417-61/c  
; Sequence 61, Application US/09266417  
; Patent No. 6228588  
; GENERAL INFORMATION:  
; APPLICANT: Benton, Bret  
; APPLICANT: Lee, Ving J.  
; APPLICANT: Malouin, Francois  
; APPLICANT: Martin, Patrick K.  
; APPLICANT: Schmid, Molly B.  
; APPLICANT: Sun, Dongxu  
; TITLE OF INVENTION: METHODS OF SCREENING FOR COMPOUNDS  
; TITLE OF INVENTION: ACTIVE ON STAPHYLOCOCCUS AUREUS  
; TITLE OF INVENTION: TARGET GENES  
; NUMBER OF SEQUENCES: 111  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Lyon & Lyon  
; STREET: 633 West Fifth Street  
; CITY: Suite 4700  
; CITY: Los Angeles  
; STATE: California  
; COUNTRY: U.S.A.  
; ZIP: 90071-2066  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: 3.5" Diskette, 1.44 Mb  
; MEDIUM TYPE: storage  
; COMPUTER: IBM Compatible  
; OPERATING SYSTEM: IBM P.C. DOS 5.0  
; SOFTWARE: Word Perfect 5.1  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/09/266,417  
; FILING DATE: March 9, 1999  
; CLASSIFICATION: 435  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: 08/714,918  
; FILING DATE: September 13, 1996  
; APPLICATION NUMBER: 60/009,102  
; FILING DATE: December 22, 1995  
; APPLICATION NUMBER: 60/003,798  
; FILING DATE: September 15, 1995  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Warburg, Richard J.  
; REGISTRATION NUMBER: 32,327  
; REFERENCE/DOCKET NUMBER: 240/248  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (213) 489-1600  
; TELEFAX: (213) 955-3440  
; TELEX: 67-3510  
; INFORMATION FOR SEQ ID NO: 61:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 888 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
US-09-266-417-61

Query Match 28.8%; Score 389.6; DB 3; Length 888;  
Best Local Similarity 92.3%; Pred. No. 6e-83;  
Matches 468; Conservative 1; Mismatches 31; Indels 7; Gaps 6;  
QY 849 TTAGAGAGCTAGATGTTTACAAATTAAGAGCAATTAGAACTTTGGTGGTTAA 908  
Db 888 TTAGAGAGCTAGATG-TCCCAATNTTAAGAGCAATTAGAAAG-TTGGTGGTTAA 831  
QY 909 ACCTCGTTTCAATGAACATCAATTCGCAATCAAGTTATGTAGATGATTCACACCA 968  
Db 830 ACCTC-NNTCNATGACTACATCGCAATCAAGTTAATGTAGCTGATTATGNACACCA 772

QY 969 TCCAAAGAGAAATAGTCTCAATTTGACACAGCAGAAAGAAATATCCACATAAAGAGT 1028  
Db 771 TCCAAAGAGAAATAGTCTGNNCAATTTGAACCCGACGAAAGAAATATCCACATAAAGAGT 712  
QY 1029 TGTTCAGATATTC-AACCAACACACTTTCTCTAGAACACCAAGCAATTTTAAATGAATTTG 1087  
Db 711 TGTTCAGATATNTCAAACCAACACACTTTCTCTAGAACACCAAGCAATTTTAAATGAATTTG 652  
QY 1088 CAGAAAGTTTAAAGAGCAGATCGTGATTT-CTTATGTGAAATTTTGGCTCAATTTAG 1145  
Db 651 CAGAAAGTTTAAAGAGCAGATCGTGATTTCTTATTGTGAAATTTTGGATCAATTTAG 592  
QY 1146 AGAAATTTCTGGCGCATTAACGATACAGATTTAAATTCGATAAAATTTGAGGTGCATCGTT 1205  
Db 591 AGAAATTTCTGGCGCATTAACGATACAGATTTAAATTCGATAAAATTTGAGGTGCATCGTT 532  
QY 1206 CATTAAATGAAGATCTTAAATTAATGATTAAGAACAAATTTGATATGCTGTGTTT-ATTTA 1264  
Db 531 AATTAATGAAGATCTTAAATTAATGATTAAGAACAAATTTGATATGCTGTGTTTCAATTTA 472  
QY 1265 TGGTGCAGGTGATATTCAGAAATTTACAAATTCGATATTTAGATAAAATTTAGGCATGAAA 1324  
Db 471 TGGTGCAGGTGATATTCAGAAATTTACAAATTTAGATAAAATTTAGGCATGAAA 412  
QY 1325 ATGCGTTTAAATGATTTTATAATAG 1351  
Db 411 ATGCGTTTAAATGATTTTATAATAG 385

## RESULT 10

US-09-528-709-61/c  
; Sequence 61, Application US/09528709  
; Patent No. 6630303  
; GENERAL INFORMATION:  
; APPLICANT: Benton, Bret  
; APPLICANT: Lee, Ving  
; APPLICANT: Malouin, Francois  
; APPLICANT: Martin, Patrick K.  
; APPLICANT: Schmid, Molly B.  
; APPLICANT: Sun, Dongxu  
; TITLE OF INVENTION: STAPHYLOCOCCUS AUREUS ANTIBACTERIAL  
; TARGET GENES  
; NUMBER OF SEQUENCES: 111  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Lyon & Lyon  
; STREET: 633 West Fifth Street  
; CITY: Suite 4700  
; CITY: Los Angeles  
; STATE: California  
; COUNTRY: U.S.A.  
; ZIP: 90071-2066  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: 3.5" Diskette, 1.44 Mb  
; storage  
; COMPUTER: IBM Compatible  
; OPERATING SYSTEM: IBM P.C. DOS 5.0  
; SOFTWARE: Word Perfect 5.1  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/09/528,709  
; FILING DATE: 17-Mar-2000  
; CLASSIFICATION: 424  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US/08/714,918  
; FILING DATE: September 13, 1996  
; APPLICATION NUMBER: 60/009,102  
; FILING DATE: December 22, 1995  
; APPLICATION NUMBER: 60/003,798  
; FILING DATE: September 15, 1995  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Warburg, Richard J.  
; REGISTRATION NUMBER: 32,327  
; REFERENCE/DOCKET NUMBER: 222/005



TELECOMMUNICATION INFORMATION:  
TELEPHONE: (213) 489-1600  
TELEFAX: (213) 955-0440  
TELEX: 67-3510  
INFORMATION FOR SEQ ID NO: 61:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 888 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
SEQUENCE DESCRIPTION: SEQ ID NO: 61:  
US-09-528-709-61

Query Match 28.8%; Score 389.6; DB 4; Length 888;  
Best Local Similarity 92.3%; Pred. No. 6e-83; 31; Indels 7; Gaps 6;  
Matches 468; Conservative 1; Mismatches 31; Indels 7; Gaps 6;  
QY 849 TTTAGAGAGCTAGATGTTACAAATATTAAAGAGCATTAGAAAGCTTTGGTGGTTAA 908  
DB 888 TTTAGAGAGCTAGATG-TCCCAATNTTAAAGAGCATTAGAAAGC-TTGGTGGTTAA 831  
QY 909 ACGTCGTTTCAATGAAGACTCAATGCAATCAAGTTATTGTAGATGATTGACACCA 968  
DB 830 ACGTC-NNTCNATGANACTCAATCGCAATCAAGTTAATGTAGCTGATTATGACCA 772  
QY 969 TCCAGAGAAATTAGTCTCAATTTGACACAGCAGCAAGAAATATCCACATAAAGAAGT 1028  
DB 771 TCCAGAGAAATTAGTGNNCAATTTGAACCGCAGCAAGAAATATCCACATAAAGAAGT 712  
QY 1029 TGTTCAGATTTTTC-AACCACACACTTTCTCTAGAACACACAGCATTTTTAAATGAATTG 1087  
DB 711 TGTTCAGATNTTCAACACACACTTTCTCTAGAACACAGCATTTTTAAATGAATTG 652  
QY 1088 CAGAAAGTTTAAAGCAGATCGTGTATT--CTTATGTGAATTTTGGCTCAATTAG 1145  
DB 651 CAGAAAGTTTAAAGCAGATCGTGTATTCTTTATTGTGAATTTTGGATCAATTAG 592  
QY 1146 AGAAATTTCTGGCGCATTAACCATACAGATTTAATGTATAAATTTGGAGTGCATCGTT 1205  
DB 591 AGAAATTTCTGGCGCATTAACGACAGATTTAATGTATAAATTTGGAGTGCATCGTT 532  
QY 1206 CATTAAATGAAGATCTTATTAATGTATTAGAACAAATTTGATATGCTGTGTTT-ATTTA 1264  
DB 531 AATTAAATGAAGATCTTATTAATGTATTAGAACAAATTTGATATGCTGTGTTTCAATT 472  
QY 1265 TGGTGCAGGTGATATTTCAAAATTTACAAATTTAGTAAATTTAGTAAATTTAGCATGA 1324  
DB 471 TGGTGCAGGTGATATTTCAAAATTTACAAATTTAGTAAATTTAGTAAATTTAGCATGA 412  
QY 1325 ATGCGGTTTCAATATGTTTATATAGAG 1351  
DB 411 ATGCGGTTTCAATATGTTTATATAGAG 385

RESULT 11  
US-09-527-745-61/c  
Sequence 61, Application US/09527745  
Patent No. 6638718  
GENERAL INFORMATION:  
APPLICANT: Benton, Bret  
Lee, Ving  
Malouin, Francois  
Martin, Patrick K.  
Schmid, Molly B.  
Sun, Dongxu  
TITLE OF INVENTION: STAPHYLOCOCCUS AUREUS ANTIBACTERIAL  
TARGET GENES  
NUMBER OF SEQUENCES: 111  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Lyon & Lyon  
STREET: 633 West Fifth Street  
Suite 4700  
CITY: Los Angeles

STATE: California  
COUNTRY: U.S.A.  
ZIP: 90071-2066  
COMPUTER READABLE FORM:  
MEDIUM TYPE: 3.5" Diskette, 1.44 Mb  
storage  
COMPUTER: IBM Compatible  
OPERATING SYSTEM: IBM P.C. DOS 5.0  
SOFTWARE: Word Perfect 5.1  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/09/527,745  
FILING DATE: 17-Mar-2000  
CLASSIFICATION: 424  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US/08/714,918  
FILING DATE: September 13, 1996  
APPLICATION NUMBER: 60/009,102  
FILING DATE: December 22, 1995  
APPLICATION NUMBER: 60/003,798  
FILING DATE: September 15, 1995  
ATTORNEY/AGENT INFORMATION:  
NAME: Warburg, Richard J.  
REGISTRATION NUMBER: 32,327  
REFERENCE/DOCKET NUMBER: 222/005  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (213) 489-1600  
TELEFAX: (213) 955-0440  
TELEX: 67-3510  
INFORMATION FOR SEQ ID NO: 61:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 888 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
SEQUENCE DESCRIPTION: SEQ ID NO: 61:  
US-09-527-745-61

Query Match 28.8%; Score 389.6; DB 4; Length 888;  
Best Local Similarity 92.3%; Pred. No. 6e-83; 31; Indels 7; Gaps 6;  
Matches 468; Conservative 1; Mismatches 31; Indels 7; Gaps 6;  
QY 849 TTTAGAGAGCTAGATGTTACAAATATTAAAGAGCATTAGAAAGCTTTGGTGGTTAA 908  
DB 888 TTTAGAGAGCTAGATG-TCCCAATNTTAAAGAGCATTAGAAAGC-TTGGTGGTTAA 831  
QY 909 ACGTCGTTTCAATGAAGACTCAATGCAATCAAGTTATTGTAGATGATTGACACCA 968  
DB 830 ACGTC-NNTCNATGANACTCAATCGCAATCAAGTTAATGTAGCTGATTATGACCA 772  
QY 969 TCCAGAGAAATTAGTCTCAATTTGACACAGCAGCAAGAAATATCCACATAAAGAAGT 1028  
DB 771 TCCAGAGAAATTAGTGNNCAATTTGAACCGCAGCAAGAAATATCCACATAAAGAAGT 712  
QY 1029 TGTTCAGATTTTTC-AACCACACACTTTCTCTAGAACACACAGCATTTTTAAATGAATTG 1087  
DB 711 TGTTCAGATNTTCAACACACACTTTCTCTAGAACACAGCATTTTTAAATGAATTG 652  
QY 1088 CAGAAAGTTTAAAGCAGATCGTGTATT--CTTATGTGAATTTTGGCTCAATTAG 1145  
DB 651 CAGAAAGTTTAAAGCAGATCGTGTATTCTTTATTGTGAATTTTGGATCAATTAG 592  
QY 1146 AGAAATTTCTGGCGCATTAACCATACAGATTTAATGTATAAATTTGGAGTGCATCGTT 1205  
DB 591 AGAAATTTCTGGCGCATTAACGACAGATTTAATGTATAAATTTGGAGTGCATCGTT 532  
QY 1206 CATTAAATGAAGATCTTATTAATGTATTAGAACAAATTTGATATGCTGTGTTT-ATTTA 1264  
DB 531 AATTAAATGAAGATCTTATTAATGTATTAGAACAAATTTGATATGCTGTGTTTCAATT 472  
QY 1265 TGGTGCAGGTGATATTTCAAAATTTACAAATTTAGTAAATTTAGTAAATTTAGCATGA 1324  
DB 471 TGGTGCAGGTGATATTTCAAAATTTACAAATTTAGTAAATTTAGTAAATTTAGCATGA 412



STREET: 9410 Key West Avenue  
CITY: Rockville  
STATE: Maryland  
COUNTRY: USA  
ZIP: 20850  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Diskette, 3.50 inch, 1.4mb storage  
COMPUTER: HP Vectra 486/33  
OPERATING SYSTEM: MSDOS version 6.2  
SOFTWARE: ASCII Text  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/09/536,784  
FILING DATE: 30-Oct-1997  
CLASSIFICATION: <Unknown>  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 08/961,083  
FILING DATE: OCT-30-1997  
ATTORNEY/AGENT INFORMATION:  
NAME: Michelle S. Marks  
REGISTRATION NUMBER: 41,971  
REFERENCE/DOCKET NUMBER: P8340E3  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (301) 309-8594  
TELEFAX: (301) 309-8512  
INFORMATION FOR SEQ ID NO: 115:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 1267 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: double  
TOPOLOGY: linear  
SEQUENCE DESCRIPTION: SEQ ID NO: 115:  
US-09-536-784-115

Query Match 27.2%; Score 367; DB 4; Length 1267;  
Best Local Similarity 58.4%; Pred. No. 1.4e-77;  
Matches 719; Conservative 0; Mismatches 500; Indels 12; Gaps 4;  
QY 84 GCATGATTAGACATGAGTCAAGGATCGATATGAGACTACGATATACAGAGT 143  
DB 1 GCACCAGATGGGCAAGGTTGAGGATCGATGTTGAAAGTACTCTTACCCAGC 60  
QY 144 TCCTCTAGAAATAGGGGATAAATAATTACATTTGGTGTCTAATAACATAAAGAAGA 203  
DB 61 CGGTCTTGAGCAGGAGGAATACATCTCTTTGATGATAAATACTAGACGGTGA 120  
QY 204 TATGTAGTTATACAGGTAATGCATT---CGGAGTAGCCATGAGAAATAGTAGTSC 260  
DB 121 TATGGAAATATCGCTGGAAATGCCCTTCGTCCAGATAACAACGTCGAAATTCCTATGC 180  
QY 261 ACATCAATTAAGATTAGATTGTGTAGTTATATGATTTTATAGGACAGATTATTCATCA 320  
DB 181 GGACCAAAATGGTATCAGCTACAACGTTACCATGAGTTCTAGGTAGCTTTATGCGTGA 240  
QY 321 ATATATCTCAGTAGCTGTAACCTGGTGCACATGTTAAATCTCTACACAGGTTTATATAC 380  
DB 241 CTTTGTAGATCGGGAGTAGCAGGAGCAGTGAATAAATCTCAACACAGGTAATGTGTC 300  
QY 381 ACATGTTATGAATGGTGAATAAAGACTTCATTTTAAATGGTGTGACAGGATATGG 440  
DB 301 TCAATGCTTGTCTCAATACAGATACAGCTTCCTGATTTGGAGATGGGACAGGCTGG 360  
QY 441 ATTGCTGAAAGTATGATTTTCTTTGAGGATGTAATATAGAGCTCACTTTTAAAG 500  
DB 361 TTCGGCAATGCCAAATATTTTGTCTTTGATCTGACGAATATGAGGTCACCTTCATGCC 420  
QY 501 TTATAACCTGATTACCAATATGACAAATATGATTCGATCATCTCGATTATTTCAA 560  
DB 421 TTACCACCCAGAACTCTATATATACCAATATGACTTTGACCATCCAGATTATTTAC 480  
QY 561 AGATATTATATGATTTTGTATGATTCAGAAATGCGCATATGCTTAAAGAGTAT 620  
DB 481 AAGTCTGAGGATGTTTAAATGCTTTAAACGACTATGCGCAAAACAAATCACCAGGCTCT 540

QY 621 TATTGCTTGGGTGATGATCAACATCTAGTAAATTTGAGCAGATGTTCCAAATTTATA 680  
DB 541 TTTTGTCTATGTTGAGAGATGCTGAATTCGTAAGATTACGTTCTGATGACCAATTTATA 600  
QY 681 CTATGGATTTAAAGATTGCG---ATGACATTTATGCTCAAAATATTTCAAATTTACGATTA 737  
DB 601 TTATGGTTTTGAGCTGAGGCAATGACTTTGTAGTAGTATGATCTTCTTGTCTCAATAAC 660  
QY 738 AGGTACTGCTTTTGTATGTTGATGTTGAGTGGAGTGTATGATCTCTCTCTGCTCTCCACA 797  
DB 561 TGGTTCAACCTTCACCGTTTCAATTTCCGTGGACAAATCTTGGGCAATTTCCCAATTTCAAAC 720  
QY 798 AATGTTGACCATACAGTTTAAATGCAATGATGCTTAATTCGATTTAGTATTTAGAGAA 857  
DB 721 CTTTGGTCTGTCACCAATATCATGAATGCGACGCGTATTTGTTCTTTTTCACAGCAGG 780  
QY 858 GCTAGATGTTACAAATATTAAGAGAGCATTAAGAAACGTTTGGTGGTGTAAACGTCGTT 917  
DB 781 AATTGATTTGAACTTTGGTGGTGGACACTTGAACACATTTGCCGCTGTTAAACGTCGTT 840  
QY 918 CAATCAAACTACAATTTGCAAAATCAAGTTATTTGTAGATGATTTATGACACCATCCAGAGA 977  
DB 841 CACTGAGAAATTTGTAATGATACAGTATGATGATGATGATGATGATGATGATGATGATGAT 900  
QY 978 AATTAGTCTACATTTGACACAGCAGGAGAAATATCCACATAAAGAGTGTGTGCACT 1037  
DB 901 AATTATTGCGACCTTTGGATGGGCTCGTCAGAAATATCCCAAGCAAGGAATTTGTAGCACT 960  
QY 1038 ATTTCACACACACACTTTCTTAGAACACAACGATTTTAAATGATTTTTCAGAGAGTTT 1097  
DB 961 CTTTCAACCGCATACCTTTACAGAACCATTTGCCTTTGTGGACGACTTTGCCCATGCTTT 1020  
QY 1098 ATGTAAGCAGATCGTGTATTTATGTAAGTAAATTTTGGCTCAATTAG---AGAAATTC 1154  
DB 1021 AAACCAAGCAGATGCTGTTTATCTAGCGCAAAATTTATGGCTCGCTGAGTAGATCA 1080  
QY 1155 TGGCGATTAAAGATACAGATTTAATGATTAAT---TGGAGGTGCTCGTTTCATTA 1211  
DB 1081 TGGTCAGCTTAAGGTAGAGACCTAGCCAAACAAATCAACAAACACCAAGTATAC 1140  
QY 1212 TGAAGATCTTATTAATGATTAAGACATTTGATAATGCTGTTGTTTATTTATGGTGC 1271  
DB 1141 TGTGAAATGTTTCTCCACTCTAGCATGATGATGCTGTTTACTCTTTATGGGAGC 1200  
QY 1272 AGGTGATATTCAAAATTAACAAATGATAT 1302  
DB 1201 AGGAGATCCAAACCTATGATACTCTATTT 1231

RESULT 14  
US-09-107-532A-3260  
Sequence 3260, Application US/09107532A  
Patent No. 6583275  
GENERAL INFORMATION:  
APPLICANT: Lynn A Doucette-Stamm and David Bush  
TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO ENTEROCOCCUS FAECIUM FOR DIAGNOSTICS AND THERAPEUTICS  
NUMBER OF SEQUENCES: 7310  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: GENOME THERAPEUTICS CORPORATION  
STREET: 100 Beaver Street  
CITY: Waltham  
STATE: Massachusetts  
COUNTRY: USA  
ZIP: 02354  
COMPUTER READABLE FORM:  
MEDIUM TYPE: CD-ROM ISO9660  
COMPUTER: PC  
OPERATING SYSTEM: <Unknown>  
SOFTWARE: ASCII  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/09/107,532A  
FILING DATE: 30-Jun-1998

PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 60/C85,598  
FILING DATE: 14 May 1998  
APPLICATION NUMBER: 60/051571  
FILING DATE: July 2, 1997  
ATTORNEY/AGENT INFORMATION:  
NAME: Ariniello, Pamela Deneke  
REGISTRATION NUMBER: 42,489  
REFERENCE/DOCKET NUMBER: GTC-012  
TELEPHONE: (781)893-5007  
TELEFAX: (781)893-8277  
INFORMATION FOR SEQ ID NO: 3260:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 873 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: double  
TOPOLOGY: circular  
MOLECULE TYPE: DNA (genomic)  
HYPOTHETICAL: NO  
ANTI-SENSE: NO  
ORIGINAL SOURCE:  
ORGANISM: Enterococcus faecium  
FEATURE:  
NAME/KEY: misc feature  
LOCATION: (B) LOCATION 1...873  
SEQUENCE DESCRIPTION: SEQ ID NO: 3260:  
US-09-107-532A-3260

Query Match 26.0%; Score 350.8; DB 4; Length 873;  
Best Local Similarity 62.8%; Pred. No. 8,48-74;  
Matches 544; Conservative 0; Mismatches 322; Indels 0; Gaps 0;

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DB 7 AGGATTCAAATGGAAATCAAAATAAATTTGATCATTTTGTGATCAAAAGGTTCAAGGA 66  
QY 61 ATGAGTTCATTAGCACAAATCATCATGATTTAGGATGAAATTCAGGATCGGATGATTT 120  
DB 67 ATGAGTTCCTTGGCTCTGTTTACATGACCAAGTCTAATGTCGAAGGATCAGACATT 126  
QY 121 GAGAACTACGATTTTATCAGAGATGCTCTTAGAATAAGGGGTAATAATTAACCATTT 180  
DB 127 GAAATAATTTCTTTACACAAAGAGATTTAGAAAAGCNAATATACGATTTCTGCCATTT 186  
QY 181 GGTGCTAATACATAAAGAGATATGCTAGTATATACAGGTAATGATTCGCGAGTAGC 240  
DB 187 AACCGATATATGTAACACCGGATGACGATCATTCGAGGAATGCAATTTCTGATCA 246  
QY 241 CATGAAGAAATAGTACGTGCAATCAATTTGAAATTAGATGTTGTAAGTTATAATGATTTT 300  
DB 247 CATGAAGAAATCCAGCGAGCAAAAGAAATAGGTTTGAAGTGAATTCGCTATCAGCATTT 306  
QY 301 TTAGACAGATTTATGATCAATATACITCAGTAGCTGTAACCTGTCACATGGTAARACT 360  
DB 307 ATTGGTCAATTTTATCCAAATTTATACAGATATCGCTGTAAACAGGCTCTCAAGGAAACA 366  
QY 361 TCTACACAGATTTATATCATGTTATGATGATGATGATAAAGACATTCATTTTAATT 420  
DB 367 AGTACGACTGACACTCTCTCATGATTTAGTGTGTCGCTCCAGCAAGTATCATTAAT 426  
QY 421 GGTGATGCGACAGGATATGGGATGCTGAAAGTGAATTAATTCGCTTTTGAAGCATGTGAA 480  
DB 427 GGAGATGGAACAGGATGTTGATCCGCAAGCGGAATTCCTTTTCAATTTGAGGCTGTGAA 486  
QY 481 TATAGACGCTCTTTTAAAGTATTAACCTGATTAACGCAATATACAAATATGATTTTC 540  
DB 487 TATCGCGCTCAATTCCTGCTTATTCACAGACTATGCAATCATGACCAATATGATTTT 546  
QY 541 GATCATCTGATTTTCAAGATATTAATGATGTTTTTGTGATGCTTCCAGAAATGCA 600  
DB 547 GATCATCGGATTTATATACAAAGTATCGACGATGATTTTACAGCTTTCCTCAACATGGCT 606

QY 601 CATATATGTTAAAAAGGTATTAATTTGCTGGGGTGAATGATGAACATCTCTCTAAATTTGAA 660  
DB 607 GGACAAAGTGAATAAAGCTATTTTGGTATGATGATGATGATGATGATGATGATGATGATG 666  
QY 661 GCAGATGTTCCAAATTTTACTATGATGATTTAAAGATTCGGATGACATTTATGCTCAAAAT 720  
DB 667 GCAAATGTCGGATTTTATTAATTAATGATGATGATGATGATGATGATGATGATGATGATG 726  
QY 721 ATTCAAATTAACGATTAAGGTACTGCTTTTGTATGATGATGATGATGATGATGATGATGATG 780  
DB 727 ATCGAAGGCAACTTCTGCTTCTGCTTTTGTATGATGATGATGATGATGATGATGATGATG 786  
QY 781 CACTTCTGCTCCAAATTAATGATGATGATGATGATGATGATGATGATGATGATGATGATG 840  
DB 787 CACTTCACTGATCCAGCAATTCGGTAAACACGATATCTTAATGCTTTAGGTGTTATTGCA 846  
QY 841 ATTAGTATTTAGAGAGCTAGATGT 866  
DB 847 GTAGCTTATGTCGAGAACTGGATCT 872

RESULT 15  
US-08-940-572-3/C  
; Sequence 3, Application US/08940572  
; Patent No. 6310193  
; GENERAL INFORMATION:  
; APPLICANT: Wallis, Nicola G.  
; APPLICANT: Black, Michael T.  
; APPLICANT: Hodgson, John E.  
; APPLICANT: Knowles, David J.  
; APPLICANT: Lonetto, Michael A.  
; APPLICANT: Nicholas, Richard O.  
; APPLICANT: Stodola, Robert K.  
; TITLE OF INVENTION: No. 6310193el MurC  
; NUMBER OF SEQUENCES: 6  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Dechert, Price & Rhoads  
; STREET: 4000 Bell Atlantic Tower, 1717 Arch Stre  
; CITY: Philadelphia  
; STATE: PA  
; COUNTRY: USA  
; ZIP: 19103-2793  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Diskette  
; COMPUTER: IBM Compatible  
; OPERATING SYSTEM: DOS  
; SOFTWARE: FastSeq for Windows Version 2.0  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/940,572  
; FILING DATE:  
; CLASSIFICATION: 536  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 60/024022  
; FILING DATE: 16-AUG-1996  
; APPLICATION NUMBER: US 08/889711  
; FILING DATE: 08-JUL-1997  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Dickinson, Q. Todd  
; REGISTRATION NUMBER: 28,354  
; REFERENCE/DOCKET NUMBER: P50533-04  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: 215/994-2252  
; TELEFAX: 215/994-2222  
; TELEX:  
; INFORMATION FOR SEQ ID NO: 3:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 1825 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: double  
; TOPOLOGY: linear  
; US-08-940-572-3

Query Match 22.9%; Score 308.8; DB 4; Length 1825;

Best Local Similarity 58.9%; Pred. No. 8.6e-64;		Db		777 ACTCAATT 770	
Matches 606; Conservative 0; Mismatches 412; Indels 10; Gaps 4;				Search completed: June 25, 2004, 20:27:01	
				Cob time : 118 secs	
QY	285 AAGTTATAATGATTTTATAGACAGATTTATGATCAATATCTTCACTGAGTGTAACTGG 344				
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QY	345 TGCACATGGTAAATCTTACACAGAGTTTATATACATGTTATGATGGTGATAAAAA 404				
Db	1737 AGCAGATGAAATCTTCAACAGCAGGATGTGTCTCATGTCTTGTCTCACTTACAGA 1678				
QY	405 GACTTCATTTTAAATTGGTATGGACACAGATGGGATGCGCTGAAAGTGATTTTTCG 464				
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QY	465 TTTTGAGCATGTGAATATAGACGTTCATTTTAAAGTTATTAACCTGATAGCAATAT 524				
Db	1617 CTTTCAATCTGACGAATATGAGGTCACTTCATGCTTACCACCCAGATACTCTATTAT 1558				
QY	525 GACAAATATTGATTCGATCATCTGATTTATTTCAAAGATATTATGATGTTTTTGATGC 584				
Db	1557 CACCAACATTTGACTTTGACATCCAGATTTATTTCACTAGTCTCGAGAGTGTTCATG 1498				
QY	585 ATTCAGAAATGGCACATAATGTTTAAAAAGSTATTATTGCTTGGGGTGATGATGAACA 644				
Db	1497 CTTTAACTGATGCCAACAATTTACGATGGTCTTTTGTCTATGTTGAAGATGCTGA 1438				
QY	645 TCTAGTAAATGAGACAGATGTTCCAAATTTATTTACTATGATTTTAAAGATTCGG--A 701				
Db	1437 ATTGGTAAATATAGTCTGATGACCAATTTATTATTATGTTTGAAGCTGAAGGCAA 1378				
QY	702 TGACATTTATGCTCAAAATATTCAAAATTTAGGATTAAGGTACTGCTTTTGTGTTATGT 761				
Db	1377 TGACTTTTGTAGTAGTATCTTCTCGTTCACAACTGGTTCAACCTTCACTTCACTT 1318				
QY	762 GGATGCTGAGTTTATGATCACTTCTGCTCCACAAATATGTTGACCACTACAGTTTTAAA 821				
Db	1317 CCGTGACAAACTTGGGCAATTTCCACATTTCCACTTTGGTCTGTCACAAATCATGAA 1258				
QY	822 TGCAATGAGTAAATGCGAATTTAGTTATTTAGAGAGCTAGATGTTTACAATATTAAAGA 881				
Db	1257 TGGACAGCGGTATTGCTTCTTTTACACAGAGGATTTGATTTGAACCTTGGTGGTGA 1198				
QY	882 ASCATTAGAAAGCTTTGGTGGTGTAAACCTGCTTTCAATGAAACTACAAATTCGAATCA 941				
Db	1197 GCACTTGAAACAAATTTGCCGGTGTAAACCTGCTTTCTGAGAAAATTTGTCATGATC 1138				
QY	942 AGTTATTGTAGATGATTATGCACACCATCCAGAGAAATTTAGTGTACAAATTCACACAGC 1001				
Db	1137 AGTGATTTATGATGACTTTTGGCCATCATCCACAGAAATTTATGCGACCTTGGATGGGC 1078				
QY	1002 AGGAAGAAATATCCACATAAAGAGTTGTTGAG-TATTTCAACCCACACACTTCTCTA 1060				
Db	1077 TCGTCAGAAATACCCAGCAAGGAAATTTAGCAGTTCTTTCCACCCGATACCTTTACAA 1018				
QY	1061 GAACACAGCATTTTAAATGAAATTTGCAGAAATTTTAAAGCAGATCGTGTATCT 1120				
Db	1017 GAACCAATGCTGTTGGAGCAGCTTTGCCCATGCTTTTAAACCAAGCAGATGCTGTTATC 958				
QY	1121 TATGTGAAATTTTGGCTCAATTAG---AGAAAATCTGGCGCATTAACCATCAAGATT 1177				
Db	957 TAGCGCAATTTATGCTCGCTCGTGAAGTAGATCATGTTGAGCTTAAAGTAGAGACC 898				
QY	1178 TAATTGATAAAT---TGGAGGTGCATCGTTTCAATTAAGATCTTATTAAATGATTAG 1234				
Db	897 TAGCAATAAAATACAAAAAACCAACCAAGTGATTACTGTGAAATGTTTCTCCACTCC 838				
QY	1235 AACAAATTTGATGCTGTTGTTTATTATTGGGTGAGGTGATTTCAAAAAATTACAAA 1294				
Db	837 TAGACCAATGCAATGCTGTTTACGTTCTTTATGGGACGAGGACATCCAAACCTATGAT 778				
QY	1295 ATGCATAT 1302				

Mon Jun 28 09:30:48 2004

GenCore version 5.1.6  
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OM nucleic - nucleic search, using sw model

Run on: June 25, 2004, 19:30:57 ; Search time 631 Seconds  
(without alignments)  
9808.323 Million cell updates/sec

Title: US-09-103-287-1

Perfect score: 1351

Sequence: 1 atgagtaaggagtttatat.....ttaatatgtttataatagag 1351

Scoring table: IDENTITY NUC

Gapop 10.0, Gapext 1.0

Searched: 3017426 seqs, 2290544650 residues

Total number of hits satisfying chosen parameters: 6034852

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : Published Applications NA: \*

- 1: /cgn2\_6/ptodata/1/pubna/US07\_PUBCOMB.seq.\*
- 2: /cgn2\_6/ptodata/1/pubna/PCT\_NEW\_PUB.seq.\*
- 3: /cgn2\_6/ptodata/1/pubna/US06\_NEW\_PUB.seq.\*
- 4: /cgn2\_6/ptodata/1/pubna/US06\_PUBCOMB.seq.\*
- 5: /cgn2\_6/ptodata/1/pubna/US07\_NEW\_PUB.seq.\*
- 6: /cgn2\_6/ptodata/1/pubna/PCTUS\_PUBCOMB.seq.\*
- 7: /cgn2\_6/ptodata/1/pubna/US08\_NEW\_PUB.seq.\*
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- 10: /cgn2\_6/ptodata/1/pubna/US09B\_PUBCOMB.seq.\*
- 11: /cgn2\_6/ptodata/1/pubna/US09C\_PUBCOMB.seq.\*
- 12: /cgn2\_6/ptodata/1/pubna/US09\_NEW\_PUB.seq.\*
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- 17: /cgn2\_6/ptodata/1/pubna/US10\_NEW\_PUB.seq.\*
- 18: /cgn2\_6/ptodata/1/pubna/US60\_NEW\_PUB.seq.\*
- 19: /cgn2\_6/ptodata/1/pubna/US60\_PUBCOMB.seq.\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

# SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	1330.2	98.5	2424	8	US-08-781-986A-392
2	1330.2	98.5	2424	13	US-10-329-624-392
3	1319	97.6	1315	9	US-09-815-242-8195
4	1296.4	96.0	1314	13	US-10-282-122A-7596
5	1295	95.9	1311	9	US-09-815-242-4242
6	1293.2	95.7	1318	9	US-09-925-637-1
7	1293.2	95.7	1318	15	US-10-084-205-1
8	1293.2	95.7	1318	17	US-10-712-713-1
9	906.2	67.1	1311	13	US-10-282-122A-34994
10	599.2	44.4	619	9	US-09-939-980-179
11	589.6	43.6	1308	13	US-10-282-122A-10147
12	553.4	41.0	1371	9	US-09-815-242-6773
13	551.8	40.8	1335	13	US-10-282-122A-21122
14	531.2	39.3	3011208	16	US-10-398-221-2058

15	524	38.8	495269	16	US-10-398-221-8	Sequence 8, Appli
16	516.4	38.2	1344	13	US-10-282-122A-24804	Sequence 24804, A
17	513	38.0	1332	13	US-10-282-122A-21467	Sequence 21467, A
18	490	36.3	738	13	US-10-282-122A-35131	Sequence 35131, A
19	444.6	32.9	1329	13	US-10-282-122A-38211	Sequence 38211, A
20	424.6	31.4	1328	13	US-10-282-122A-35995	Sequence 35995, A
21	399.2	29.5	1335	9	US-09-815-242-9409	Sequence 9409, Ap
22	399.2	29.5	1335	13	US-10-282-122A-37889	Sequence 37889, A
23	397.6	29.4	11864	13	US-10-158-844-61	Sequence 61, Appl
24	367	27.2	1267	9	US-09-765-272-115	Sequence 115, App
25	335	24.8	951	9	US-09-974-300-6133	Sequence 291, App
26	316.4	23.4	4956	9	US-09-070-927A-780	Sequence 780, App
27	314.8	23.3	677	9	US-09-070-927A-780	Sequence 3296, Ap
28	303.4	22.5	1451	16	US-10-398-221-3296	Sequence 2928, Ap
29	255.4	18.9	257	9	US-09-815-242-2928	Sequence 5503, Ap
30	255.4	18.9	257	13	US-10-282-122A-5503	Sequence 1299, Ap
31	237.2	17.6	897	16	US-10-398-221-1299	Sequence 1571, Ap
32	225	16.7	225	9	US-09-815-242-1571	Sequence 1599, Ap
33	225	16.7	225	9	US-09-815-242-1599	Sequence 1631, Ap
34	225	16.7	225	9	US-09-815-242-1631	Sequence 1637, Ap
35	225	16.7	225	9	US-09-815-242-1637	Sequence 4091, Ap
36	225	16.7	225	13	US-10-282-122A-4091	Sequence 4131, Ap
37	225	16.7	225	13	US-10-282-122A-4131	Sequence 4174, Ap
38	225	16.7	225	13	US-10-282-122A-4174	Sequence 4178, Ap
39	225	16.7	225	13	US-10-282-122A-4178	Sequence 1416, Ap
40	204.4	15.1	206	9	US-09-815-242-1416	Sequence 3941, Ap
41	204.4	15.1	206	13	US-10-282-122A-3941	Sequence 4100, Ap
42	203	15.0	227	13	US-10-282-122A-4100	Sequence 3575, Ap
43	158	11.7	158	9	US-09-815-242-3575	Sequence 3615, Ap
44	158	11.7	158	9	US-09-815-242-3615	Sequence 6150, Ap
45	158	11.7	158	13	US-10-282-122A-6150	

## ALIGNMENTS

### RESULT 1

US-08-781-986A-392  
Sequence 392, Application US/08781986A  
Publication No. US20030054436A1

#### GENERAL INFORMATION:

APPLICANT: Charles Kunsch  
TITLE OF INVENTION: Staphylococcus aureus Polynucleotides and Sequences  
NUMBER OF SEQUENCES: 5255  
CORRESPONDENCE ADDRESSES:  
ADDRESSEE: Human Genome Sciences, Inc.  
STREET: 9410 Key West Avenue  
CITY: Rockville  
STATE: Maryland  
COUNTRY: USA  
ZIP: 20850

#### COMPUTER READABLE FORM:

MEDIUM TYPE: Diskette, 3.50 inch, 1.4mb storage  
COMPUTER: HP Vectra 486/33  
OPERATING SYSTEM: MSDOS version 6.2  
SOFTWARE: ASCII Text

#### CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/781,986A

#### FILING DATE:

CLASSIFICATION: 435

#### PRIOR APPLICATION DATA:

APPLICATION NUMBER:

#### FILING DATE:

ATTORNEY/AGENT INFORMATION:

NAME: Berson, Bob

REGISTRATION NUMBER: 30,446

REFERENCE/DOCKET NUMBER: PB248PP

TELEPHONE: (301) 309-8504

TELEFAX: (301) 309-8512

INFORMATION FOR SEQ ID NO: 392:

SEQUENCE CHARACTERISTICS:

LENGTH: 2424 base pairs

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; TYPE: nucleic acid
; STRANDEDNESS: double
; TOPOLOGY: linear
US-08-781-986A-392

Query Match      98.5%; Score 1330.2; DB 8; Length 2424;
Best Local Similarity 99.0%; Pred. No. 1e-229;
Matches 1338; Conservative 0; Mismatches 13; Indels 0; Gaps 0;

QY 1 ATGAGTAAGGAGTTTATATAATGACACACTATCAATTTTGTGCGGAATTAAGGTTCTGGC 60
DB 606 ATGAGTAAGGAGTTTATATAATGACACACTATCAATTTTGTGCGGAATTAAGGTTCTGGC 665
QY 61 ATGAGTTCAATAGACAAATCATGCAATGATTTAGGACATCAAGATTCAGGATCGGATATT 120
DB 666 ATGAGTTCAATAGACAAATCATGCAATGATTTAGGACATCAAGATTCAGGATCGGATATT 725
QY 121 GAGAACTAGCTATTACAGAAGTTGCTCTTAGAAATAGGGGATAAAATATTACCATT 180
DB 726 GAGAACTAGCTATTACAGAAGTTGCTCTTAGAAATAGGGGATAAAATATTACCATT 785
QY 181 GGTGCTAATAACATAAAGAGATATGGTAGTTTATACAGGTAATGCAATTCGGGATAGC 240
DB 786 GATGCTAATAACATAAAGAGATATGGTAGTTTATACAGGTAATGCAATTCGGGATAGC 845
QY 241 CATGAAGAAATAGTAGCTGCACATCAATTCGAATTAGATCTTGTAAGTTATATGATTTT 300
DB 846 CATGAAGAAATAGTAGCTGCACATCAATTCGAATTAGATCTTGTAAGTTATATGATTTT 905
QY 301 TTAGGACAGATTATTGATCAATATACCTTCAGTAGCTGTAACTGGTGACATGTTAAACT 360
DB 906 TTAGGACAGATTATTGATCAATATACCTTCAGTAGCTGTAACTGGTGACATGTTAAACT 965
QY 361 TCTAACAAGGTTTATATACAGATGTTAATGAATGGTGATTAAGAAAGACTTCATTTTAATT 420
DB 966 TCTAACAAGGTTTATATACAGATGTTAATGAATGGTGATTAAGAAAGACTTCATTTTAATT 1025
QY 421 GGTGATGGCACAGATGAGTATGCTGCTGAAAGTGATTTATTCCTTTTGAGGCATGGA 480
DB 1026 GGTGATGGCACAGATGAGTATGCTGCTGAAAGTGATTTATTCCTTTTGAGGCATGGA 1085
QY 481 TATAGACGTCACTTTTAAAGTTAATAAAGCTGATTACGCAATTAAGCAAAATATTGATTC 540
DB 1086 TATAGACGTCACTTTTAAAGTTAATAAAGCTGATTACGCAATTAAGCAAAATATTGATTC 1145
QY 541 GATCATCTCGATTATTCGAAGATATTAAATGATGTTTTCATGCTATCCAAAGAAATGGCA 600
DB 1146 GATCATCTCGATTATTCGAAGATATTAAATGATGTTTTCATGCTATCCAAAGAAATGGCA 1205
QY 601 CATAAATGTTAAAAAGGTATTATTGCTTGGGGTGATGATGAACATCTACGTAAAAATGAA 660
DB 1206 CATAAATGTTAAAAAGGTATTATTGCTTGGGGTGATGATGAACATCTACGTAAAAATGAA 1265
QY 661 GCGAGATGTTCCAAATTTATTTATGAGATTTAAAGATTCGGATGACATTTATGCTCAAAAT 720
DB 1266 GCGAGATGTTCCAAATTTATTTATGAGATTTAAAGATTCGGATGACATTTATGCTCAAAAT 1325
QY 721 ATTCAAAATACCGATTAAGGATGCTGCTTTTGAATGATGATGATGATGATGATGATGAT 780
DB 1326 ATTCAAAATACCGATTAAGGATGCTGCTTTTGAATGATGATGATGATGATGATGATGAT 1385
QY 781 CACTTCTGCTCCCAATATGTTGACCATACAGTTTAAATGCAATTAGCTGTAATTCGG 840
DB 1386 CACTTCTGCTCCCAATATGTTGACCATACAGTTTAAATGCAATTAGCTGTAATTCGG 1445
QY 841 ATTAGTTATTAGAGAGGCTAGATGTTTACAAATTTAAAGAAAGCAATTAAGAAAGCTTTGGT 900
DB 1446 ATTAGTTATTAGAGAGGCTAGATGTTTACAAATTTAAAGAAAGCAATTAAGAAAGCTTTGGT 1505
QY 901 GGTGTTAAAGCTGCTTTCAATGAAGCTCAATTCGAATCAAGTATTGTAGATGATTAT 960
DB 1506 GGTGTTAAAGCTGCTTTCAATGAAGCTCAATTCGAATCAAGTATTGTAGATGATTAT 1565

RESULT 2
US-10-329-624-392
; Sequence 392, Application US/10329624
; Publication No. US20040043037A1
; GENERAL INFORMATION:
; APPLICANT: Charles Kunsch
; Patrick S. Dillon
; Craig A. Rosen
; Steven C. Barash
; Michael R. Fannon
; TITLE OF INVENTION: Staphylococcus aureus Polynucleotides and Sequences
; NUMBER OF SEQUENCES: 5256
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Human Genome Sciences, Inc.
; STREET: 9410 Key West Avenue
; CITY: Rockville
; STATE: Maryland
; COUNTRY: USA
; ZIP: 20850
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette, 3.50 inch, 1.4mb storage
; COMPUTER: HP Vectra 486/33
; OPERATING SYSTEM: MSDOS version 6.2
; SOFTWARE: ASCII Text
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/10329,624
; FILING DATE: 27-Dec-2002
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/956,171
; FILING DATE: October 20, 1997
; APPLICATION NUMBER: 60/009,861
; FILING DATE: January 5, 1996
; APPLICATION NUMBER: 08/781,986
; FILING DATE: January 3, 1997
; ATTORNEY/AGENT INFORMATION:
; NAME: Mark J. Hyman
; REGISTRATION NUMBER: 46,789
; REFERENCE/DOCKET NUMBER: PB248P1D1
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (240) 314-1224
; TELEFAX: (301) 309-8439
; INFORMATION FOR SEQ ID NO: 392:
; SEQUENCE CHARACTERISTICS:
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LENGTH: 2424 base pairs									
TYPE: nucleic acid									
STRANDEDNESS: double									
TOPOLOGY: linear									
SEQUENCE DESCRIPTION: SEQ ID NO: 392:									
DB-10-329-624-392									
Query Match 98.5%; Score 1330.2; DB 13; Length 2424;									
Best Local Similarity 99.0%; Pred. No. 1e-229;									
Matches 1338; Conservative 0; Mismatches 13; Indels 0; Gaps 0;									
QY	1	ATGAGTAAAGAGTTTATATAATGACACACTATCACTTTGTCGGCAATTAAGGTTCTGGC	60						
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QY	61	ATGAGTAAAGAGTTTATATAATGACACACTATCACTTTGTCGGCAATTAAGGTTCTGGC	120						
DB	666	ATGAGTAAAGAGTTTATATAATGACACACTATCACTTTGTCGGCAATTAAGGTTCTGGC	725						
QY	121	GAGAACTACGTTATTTACAGAGTTGCTCTTAGAAATAGGGATTAAGGTTCTGGC	180						
DB	726	GAGAACTACGTTATTTACAGAGTTGCTCTTAGAAATAGGGATTAAGGTTCTGGC	785						
QY	181	GCTGCTTAATACATTAAGAGATATGCTAGTTATACAGGTAATGCTATGCGGATGAGC	240						
DB	786	GATGCTTAATACATTAAGAGATATGCTAGTTATACAGGTAATGCTATGCGGATGAGC	845						
QY	241	CATGAAGAAATAGTACGTCACATCAATGAAATGAAATGAAATGAAATGAAATGAAAT	300						
DB	846	CATGAAGAAATAGTACGTCACATCAATGAAATGAAATGAAATGAAATGAAATGAAAT	905						
QY	301	TTAGGACAGATTAATGATCAATATATCTACGATGCTGCTGCTGCTGCTGCTGCTGCT	360						
DB	906	TTAGGACAGATTAATGATCAATATATCTACGATGCTGCTGCTGCTGCTGCTGCTGCT	965						
QY	361	TCTACACAGGTTTATATACATGTTATGATGCTGCTGCTGCTGCTGCTGCTGCTGCT	420						
DB	966	TCTACACAGGTTTATATACATGTTATGATGCTGCTGCTGCTGCTGCTGCTGCTGCT	1025						
QY	421	GCTGATGTCACAGGTTATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT	480						
DB	1026	GCTGATGTCACAGGTTATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT	1085						
QY	481	TATAGAGTCTACTTTTAAAGTTTAAAGTTTAAAGTTTAAAGTTTAAAGTTTAAAGTTT	540						
DB	1086	TATAGAGTCTACTTTTAAAGTTTAAAGTTTAAAGTTTAAAGTTTAAAGTTTAAAGTTT	1145						
QY	541	GATCATCTGATTTTCAAGATATTAATGATGTTTATGATGCTGCTGCTGCTGCTGCTGCT	600						
DB	1146	GATCATCTGATTTTCAAGATATTAATGATGTTTATGATGCTGCTGCTGCTGCTGCTGCT	1205						
QY	601	CATATGTTTAAAGAGTTTATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT	660						
DB	1206	CATATGTTTAAAGAGTTTATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT	1265						
QY	661	GCAGATGTTCCAAATTTTATGATGTTTAAAGTTTAAAGTTTAAAGTTTAAAGTTTAAAGTT	720						
DB	1266	GCAGATGTTCCAAATTTTATGATGTTTAAAGTTTAAAGTTTAAAGTTTAAAGTTTAAAGTT	1325						
QY	721	ATTCAAAATACGATTAAGGTTATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT	780						
DB	1326	ATTCAAAATACGATTAAGGTTATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT	1385						
QY	781	CACCTTCTGCTCCCAATATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT	840						
DB	1386	CACCTTCTGCTCCCAATATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT	1445						
QY	841	ATTAGTATTTAGAGAGCTAGATGTTTAAAGTTTAAAGTTTAAAGTTTAAAGTTTAAAGTTT	900						
DB	1446	ATTAGTATTTAGAGAGCTAGATGTTTAAAGTTTAAAGTTTAAAGTTTAAAGTTTAAAGTTT	1505						
QY	901	GGTGTAAAGCTGCTTCAATGAACTTCAATGAACTTCAATGAACTTCAATGAACTTCAATGAACT	960						

RESULT 3  
US-09-815-242-8195  
; Sequence 8195, Application US/09815242  
; Patent No. US20020061569A1  
; GENERAL INFORMATION:  
; APPLICANT: Haselbeck, Robert  
; APPLICANT: Ohlsen, Kari L.  
; APPLICANT: Zyskind, Judith W.  
; APPLICANT: Wall, Daniel  
; APPLICANT: Trawick, John D.  
; APPLICANT: Cart, Grant J.  
; APPLICANT: Yamamoto, Robert T.  
; APPLICANT: Xu, H. Howard  
; TITLE OF INVENTION: Identification of Essential Genes in  
; TITLE OF INVENTION: Prokaryotes  
; FILE REFERENCE: ELITRA-011A  
; CURRENT APPLICATION NUMBER: US/09/815,242  
; PRIOR FILING DATE: 2001-03-21  
; PRIOR APPLICATION NUMBER: 60/191,078  
; PRIOR FILING DATE: 2000-03-21  
; PRIOR APPLICATION NUMBER: 60/206,848  
; PRIOR FILING DATE: 2000-05-23  
; PRIOR APPLICATION NUMBER: 60/207,727  
; PRIOR FILING DATE: 2000-05-26  
; PRIOR APPLICATION NUMBER: 60/242,578  
; PRIOR FILING DATE: 2000-10-23  
; PRIOR APPLICATION NUMBER: 60/253,625  
; PRIOR FILING DATE: 2000-11-27  
; PRIOR APPLICATION NUMBER: 60/257,931  
; PRIOR FILING DATE: 2000-12-22  
; PRIOR APPLICATION NUMBER: 60/269,308  
; PRIOR FILING DATE: 2001-02-16  
; NUMBER OF SEQ ID NOS: 14110  
; SOFTWARE: PastSeq for Windows Version 4.0  
; SEQ ID NO 8195  
; LENGTH: 1335  
; TYPE: DNA  
; ORGANISM: Staphylococcus aureus  
; FEATURE:  
; NAME/KEY: CDS  
; LOCATION: (1)...(1335)  
US-09-815-242-8195





US-10-282-122A-7596		Query Match		96.0%; Score 1296.4; DB 13; Length 1314;	
		Best Local Similarity		99.2%; Pred. No. 9.7e-224;	
		Matches 1303; Conservative		0; Mismatches 11; Indels 0; Gaps 0;	
QY	22	ATGACACATATCATTCTCGGAATTAAGGTTCTGCGATGAGTTCATTAGCACAAATC	81		
DB	1	ATGACACATATCATTCTCGGAATTAAGGTTCTGCGATGAGTTCATTAGCACAAATC	60		
QY	82	ATGCATGATTTAGGACATGAAGTTCAAGGATCGATATTGAGAACTACGTAATTTACAGAA	141		
DB	61	ATGCATGATTTAGGACATGAAGTTCAAGGATCGATATTGAGAACTACGTAATTTACAGAA	120		
QY	142	GTTCCTCTTAGAAATAAGGGATTAATAATATACCAATTTGGTCTTAATAACATAAAGAA	201		
DB	121	GTTCCTCTTAGAAATAAGGGATTAATAATATACCAATTTGGTCTTAATAACATAAAGAA	180		
QY	202	GATATGCTAGTTATACAAAGTATGCAATTCGCGAGTAGCCATGCAAGAAATAGTACGTGCA	261		
DB	181	GATATGCTAGTTATACAAAGTATGCAATTCGCGAGTAGCCATGCAAGAAATAGTACGTGCA	240		
QY	262	CATCAATTCGAATTAGATGTTGTAAGTTATAATGATTTTITAGGACAGATTTATGATCAA	321		
DB	241	CATCAATTCGAATTAGATGTTGTAAGTTATAATGATTTTITAGGACAGATTTATGATCAA	300		
QY	322	TATACCTCAGTAGCTGTAAGTGTGACATGGTAAACCTCTACACAGGTTTATTATCA	381		
DB	301	TATACCTCAGTAGCTGTAAGTGTGACATGGTAAACCTCTACACAGGTTTATTATCA	360		
QY	382	CATGTTATGAATCGTGATAAAGACTTCAATTTTAAATGCTGATGGACAGGTATGGGA	441		
DB	361	CATGTTATGAATCGTGATAAAGACTTCAATTTTAAATGCTGATGGACAGGTATGGGA	420		
QY	442	TTGCTCTGAAAGTGATTTTCGTTTGGGATGGAATATAGACGTCCTTTTAAAGT	501		
DB	421	TTGCTCTGAAAGTGATTTTCGTTTGGGATGGAATATAGACGTCCTTTTAAAGT	480		
QY	502	TATAACCTGATTTAGCAATATGACAAATATGATTTGATTCATCTCTGATTTATTCANA	561		
DB	481	TATAACCTGATTTAGCAATATGACAAATATGATTTGATTCATCTCTGATTTATTCANA	540		
QY	562	GATATTAATGATGTTTGTGATGATTTCCAAAGATGGACATATATGTTTAAAGGATTT	621		
DB	541	GATATTAATGATGTTTGTGATGATTTCCAAAGATGGACATATATGTTTAAAGGATTT	600		
QY	622	ATTGCTTGGGCTGATGATGAACATCTACGTTAAATTTGAAGCAGATGTTCCAAATTTATAC	681		
DB	601	ATTGCTTGGGCTGATGATGAACATCTACGTTAAATTTGAAGCAGATGTTCCAAATTTATAC	660		
QY	682	TATGGATTTAAAGATTCGGATGACATTTATGCTCAAAATATTCAAATTTACGATAAAGGT	741		
DB	661	TATGGATTTAAAGATTCGGATGACATTTATGCTCAAAATATTCAAATTTACGATAAAGGT	720		
QY	742	ACTGCTTTTATGATGATGATGATGATGATTTTATGATCACTTCCTGTCCTCCAAATAT	801		
DB	721	ACTGCTTTTATGATGATGATGATGATTTTATGATCACTTCCTGTCCTCCAAATAT	780		
QY	802	GGTGACCATACAGTTTAAATGCAATTAAGTGTAAATTCGGATTTAGTATTTAGAGAGCTA	861		
DB	781	GGTGACCATACAGTTTAAATGCAATTAAGTGTAAATTCGGATTTAGTATTTAGAGAGCTA	840		
QY	862	GATGTTTCAATATTAAGAGGATTAAGAACGTTTGTGTTGTTTAAACGTCGTTTCAAT	921		
DB	841	GATGTTTCAATATTAAGAGGATTAAGAACGTTTGTGTTGTTTAAACGTCGTTTCAAT	900		
QY	922	GAAACTCAATTTGCAAAATCAAGTTTATGATGATGATGATGATGATGATGATGATGATGAT	981		
DB	901	GAAACTCAATTTGCAAAATCAAGTTTATGATGATGATGATGATGATGATGATGATGATGAT	960		
QY	982	AGTGTCTCAATTTGACACAGCAAGAAATATCCACATATAAGAGTTGTTGTCAGTATTT	1041		
DB	961	AGTGTCTCAATTTGACACAGCAAGAAATATCCACATATAAGAGTTGTTGTCAGTATTT	1020		

QY	1042	CAACCACACACTTCTCTAGACACACAAAGCAATTTTAAATCAATTTGCAGAAAGTTTATGT	1101		
DB	1021	CAACCACACACTTCTCTAGACACACAAAGCAATTTTAAATCAATTTGCAGAAAGTTTATGT	1080		
QY	1102	AAAGCAGATCGTGTATCTTCTATGTAATTTTGGCTCAATTAGAGAAATCTTGGCGCA	1161		
DB	1081	AAAGCAGATCGTGTATCTTCTATGTAATTTTGGCTCAATTAGAGAAATCTTGGCGCA	1140		
QY	1162	TTAAACATACAGATTTAAATTTGATTAATTTGGAGGTGATCGTTTCAATTAATGAAGATCTT	1221		
DB	1141	TTAAACATACAGATTTAAATTTGATTAATTTGGAGGTGATCGTTTCAATTAATGAAGATCTT	1200		
QY	1222	ATTAATGTTATTAGAAACAAATTTGATTAATTTGGAGGTGATCGTTTCAATTAATGAAGATCTT	1281		
DB	1201	ATTAATGTTATTAGAAACAAATTTGATTAATTTGGAGGTGATCGTTTCAATTAATGAAGATCTT	1260		
QY	1282	CAAAAATTTACAAAATGATATTTTAGATAAATTTAGGATGAAATGCGTTTAA	1335		
DB	1261	CAAAAATTTACAAAATGATATTTTAGATAAATTTAGGATGAAATGCGTTTAA	1314		

RESULT 5

US-09-815-242-4242

Sequence 4242, Application US/09815242

Patent No. US20020061569A1

GENERAL INFORMATION:

APPLICANT: Haselbeck, Robert

APPLICANT: Chlsen, Kari L.

APPLICANT: Zyskind, Judith W.

APPLICANT: Wall, Daniel

APPLICANT: Trawick, John D.

APPLICANT: Carr, Grant J.

APPLICANT: Yamamoto, Robert T.

APPLICANT: Xu, H. Howard

TITLE OF INVENTION: Identification of Essential Genes in

TITLE OF INVENTION: Prokaryotes

FILE REFERENCE: ELITRA.011A

CURRENT APPLICATION NUMBER: US/09/815,242

CURRENT FILING DATE: 2001-03-21

PRIOR APPLICATION NUMBER: 60/191,078

PRIOR FILING DATE: 2000-03-21

PRIOR APPLICATION NUMBER: 60/206,848

PRIOR FILING DATE: 2000-05-23

PRIOR APPLICATION NUMBER: 60/207,727

PRIOR FILING DATE: 2000-05-26

PRIOR APPLICATION NUMBER: 60/242,578

PRIOR FILING DATE: 2000-10-23

PRIOR APPLICATION NUMBER: 60/253,625

PRIOR FILING DATE: 2000-11-27

PRIOR APPLICATION NUMBER: 60/257,931

PRIOR FILING DATE: 2000-12-22

PRIOR APPLICATION NUMBER: 60/269,308

PRIOR FILING DATE: 2001-02-16

NUMBER OF SEQ ID NOS: 14110

SOFTWARE: FastSeq for Windows Version 4.0

SEQ ID NO 4242

LENGTH: 1311

TYPE: DNA

ORGANISM: Staphylococcus aureus

US-09-815-242-4242

Query Match

95.9%; Score 1295; DB 9; Length 1311;

Best Local Similarity

99.2%; Pred. No. 1.7e-223;

Matches 1303; Conservative

0; Mismatches 10; Indels 3; Gaps 0;

QY	22	ATGACACACTATCTATTTTGTGCGAATTAAGGTTCTGCGATGAGTTCATTAGCACAAATC	81		
DB	1	ATGACACACTATCTATTTTGTGCGAATTAAGGTTCTGCGATGAGTTCATTAGCACAAATC	60		
QY	82	ATGATGATTTTAGGACATGAAGTTCAAGGATCGATATTGAGAACTACGTAATTTACAGAA	141		
DB	61	ATGATGATTTTAGGACATGAAGTTCAAGGATCGATATTGAGAACTACGTAATTTACAGAA	120		
QY	142	GTTCCTCTTAGAAATAAGGGATTAATAATATACCAATTTGGTCTTAATAACATAAAGAA	201		
DB	121	GTTCCTCTTAGAAATAAGGGATTAATAATATACCAATTTGGTCTTAATAACATAAAGAA	180		
QY	202	GATATGCTAGTTATACAAAGTATGCAATTCGCGAGTAGCCATGCAAGAAATAGTACGTGCA	261		
DB	181	GATATGCTAGTTATACAAAGTATGCAATTCGCGAGTAGCCATGCAAGAAATAGTACGTGCA	240		
QY	262	CATCAATTCGAATTAGATGTTGTAAGTTATAATGATTTTITAGGACAGATTTATGATCAA	321		
DB	241	CATCAATTCGAATTAGATGTTGTAAGTTATAATGATTTTITAGGACAGATTTATGATCAA	300		
QY	322	TATACCTCAGTAGCTGTAAGTGTGACATGGTAAACCTCTACACAGGTTTATTATCA	381		
DB	301	TATACCTCAGTAGCTGTAAGTGTGACATGGTAAACCTCTACACAGGTTTATTATCA	360		
QY	382	CATGTTATGAATCGTGATAAAGACTTCAATTTTAAATGCTGATGGACAGGTATGGGA	441		
DB	361	CATGTTATGAATCGTGATAAAGACTTCAATTTTAAATGCTGATGGACAGGTATGGGA	420		
QY	442	TTGCTCTGAAAGTGATTTTCGTTTGGGATGGAATATAGACGTCCTTTTAAAGT	501		
DB	421	TTGCTCTGAAAGTGATTTTCGTTTGGGATGGAATATAGACGTCCTTTTAAAGT	480		
QY	502	TATAACCTGATTTAGCAATATGACAAATATGATTTGATTCATCTCTGATTTATTCANA	561		
DB	481	TATAACCTGATTTAGCAATATGACAAATATGATTTGATTCATCTCTGATTTATTCANA	540		
QY	562	GATATTAATGATGTTTGTGATGATTTCCAAAGATGGACATATATGTTTAAAGGATTT	621		
DB	541	GATATTAATGATGTTTGTGATGATTTCCAAAGATGGACATATATGTTTAAAGGATTT	600		
QY	622	ATTGCTTGGGCTGATGATGAACATCTACGTTAAATTTGAAGCAGATGTTCCAAATTTATAC	681		
DB	601	ATTGCTTGGGCTGATGATGAACATCTACGTTAAATTTGAAGCAGATGTTCCAAATTTATAC	660		
QY	682	TATGGATTTAAAGATTCGGATGACATTTATGCTCAAAATATTCAAATTTACGATAAAGGT	741		
DB	661	TATGGATTTAAAGATTCGGATGACATTTATGCTCAAAATATTCAAATTTACGATAAAGGT	720		
QY	742	ACTGCTTTTATGATGATGATGATGATTTTATGATCACTTCCTGTCCTCCAAATAT	801		
DB	721	ACTGCTTTTATGATGATGATGATTTTATGATCACTTCCTGTCCTCCAAATAT	780		
QY	802	GGTGACCATACAGTTTAAATGCAATTAAGTGTAAATTCGGATTTAGTATTTAGAGAGCTA	861		
DB	781	GGTGACCATACAGTTTAAATGCAATTAAGTGTAAATTCGGATTTAGTATTTAGAGAGCTA	840		
QY	862	GATGTTTCAATATTAAGAGGATTAAGAACGTTTGTGTTGTTTAAACGTCGTTTCAAT	921		
DB	841	GATGTTTCAATATTAAGAGGATTAAGAACGTTTGTGTTGTTTAAACGTCGTTTCAAT	900		
QY	922	GAAACTCAATTTGCAAAATCAAGTTTATGATGATGATGATGATGATGATGATGATGATGAT	981		
DB	901	GAAACTCAATTTGCAAAATCAAGTTTATGATGATGATGATGATGATGATGATGATGATGAT	960		
QY	982	AGTGTCTCAATTTGACACAGCAAGAAATATCCACATATAAGAGTTGTTGTCAGTATTT	1041		
DB	961	AGTGTCTCAATTTGACACAGCAAGAAATATCCACATATAAGAGTTGTTGTCAGTATTT	1020		

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QY 142 GTTGTCTTATGAAATTAAGGGGTAATAAATATTACCAATTTGGTCTTAATAACATAAAGAA 201
Db 121 GTTGTCTTATGAAATTAAGGGGTAATAAATATTACCAATTTGGTCTTAATAACATAAAGAA 180
QY 202 GATATGTTAGTTATACAGGTAAATGCAATTCGGCAGTAGCCATGAAGAAATAGTACGTGCA 261
Db 181 GATATGTTAGTTATACAGGTAAATGCAATTCGGCAGTAGCCATGAAGAAATAGTACGTGCA 240
QY 262 CATCAATTTGAAATTTAGATGTTGAAGTTATAATGATTTTATAGGACAGATTTATGATCAA 321
Db 241 CATCAATTTGAAATTTAGATGTTGAAGTTATAATGATTTTATAGGACAGATTTATGATCAA 300
QY 322 TATACCTTCAGTCTGTAAGTGGTGCACATGTTGAAGAACTTCTACACAGGTTTATATCA 381
Db 301 TATACCTTCAGTCTGTAAGTGGTGCACATGTTGAAGAACTTCTACACAGGTTTATATCA 360
QY 382 CATGTTTATGAATGGTGATAAAGACCTTCAATTTTAAATTTGGTGTATGGCAGGATGGGA 441
Db 361 CATGTTTATGAATGGTGATAAAGACCTTCAATTTTAAATTTGGTGTATGGCAGGATGGGA 420
QY 442 TTGCTGAAAGTGAATTTTGGCTTTTGAAGGATGGAATATAGACGTCACCTTTTAAAT 501
Db 421 TTGCTGAAAGTGAATTTTGGCTTTTGAAGGATGGAATATAGACGTCACCTTTTAAAT 480
QY 502 TATAAACCTGATTACGCAATATGACAAATATTGATTTTCGATCATCTCGATTTATTCAAA 561
Db 481 TATAAACCTGATTACGCAATATGACAAATATTGATTTTCGATCATCTCGATTTATTCAAA 540
QY 562 GATATTAAATGATGTTTGTGATCTTCCAAAGAAATGGCACAATATGTTTAAAGAGGTATT 621
Db 541 GATATTAAATGATGTTTGTGATCTTCCAAAGAAATGGCACAATATGTTTAAAGAGGTATT 600
QY 622 ATTGCTGGGGTGATGATGAACATCTACGTAAATTTGAAGCAGATGTTCCAAATTTATAC 681
Db 601 ATTGCTGGGGTGATGATGAACATCTACGTAAATTTGAAGCAGATGTTCCAAATTTATAC 660
QY 682 TATGGATTTTAAAGATTCGGATGACATTTATGCTCAAAATATTCAAATTTACGGATAAAGGT 741
Db 661 TATGGATTTTAAAGATTCGGATGACATTTATGCTCAAAATATTCAAATTTACGGATAAAGGT 720
QY 742 ACTGCTTTTATGATGTATGGATGGTGGATTTTATGATCACTTCTGTCCTCCCAATAT 801
Db 721 ACTGCTTTTATGATGTATGGATGGTGGATTTTATGATCACTTCTGTCCTCCCAATAT 780
QY 802 GGTGACCATACAGTTTAAATGCAATTTAGCTGTAATTTGGATTTATTTAGAGAGCTA 861
Db 781 GGTGACCATACAGTTTAAATGCAATTTAGCTGTAATTTGGATTTATTTAGAGAGCTA 840
QY 862 GATGTTTCAATATTTAAGAGCAATTAGAAAGTTTGGTGGTGTAAACGTCGTTTCAAT 921
Db 841 GATGTTTCAATATTTAAGAGCAATTAGAAAGTTTGGTGGTGTAAACGTCGTTTCAAT 900
QY 922 GAAACTCAATTTGCAAAATCAAGTTTATTGTAGATGATTATGACACCAATCCAAAGAAAT 981
Db 901 GAAACTCAATTTGCAAAATCAAGTTTATTGTAGATGATTATGACACCAATCCAAAGAAAT 960
QY 982 AGTGCTCAATTTGACACAGCAGAAAGAAATATCCACATTAAGAGTTGTTGCAATTT 1041
Db 961 AGTGCTCAATTTGACACAGCAGAAAGAAATATCCACATTAAGAGTTGTTGCAATTT 1020
QY 1042 CAACACACACTTCTCTAGAACACACAGCAATTTTAAATGAAATTTGCGAAGTTTATG 1101
Db 1021 CAACACACACTTCTCTAGAACACACAGCAATTTTAAATGAAATTTGCGAAGTTTATG 1080
QY 1102 AAACAGATCGTGATTTCTTATGTGAAATTTTGGCTCAATTTAGAGAAATTTCTGGCGA 1161
Db 1081 AAACAGATCGTGATTTCTTATGTGAAATTTTGGCTCAATTTAGAGAAATTTCTGGCGA 1140
QY 1162 TTAAGGATCAAGATTTTAAATGATTAATTTGAGGTGTCATCGTTTCAATTAATGAATCTT 1221
Db 1141 TTAAGGATCAAGATTTTAAATGATTAATTTGAGGTGTCATCGTTTCAATTAATGAATCTT 1200
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QY 1222 ATTAATGTATTAGAACAAATTTGATAATCTGTGTTGTTTTATTATGGTGAGGTGATATT 1281
Db 1201 ATTAATGTATTAGAACAAATTTGATAATCTGTGTTGTTTTATTATGGTGAGGTGATATT 1260
QY 1282 CAAAAATACAAATGCGATTTTAGATAAATTTAGGCGATGAATAATGCGTTT 1332
Db 1261 CAAAAATACAAATGCGATTTTAGATAAATTTAGGCGATGAATAATGCGTTT 1311
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## RESULT 6

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US-09-925-637-1
; Sequence 1, Application US/09925637
; Patent No. US20020103338A1
; GENERAL INFORMATION:
; APPLICANT: Choi
; TITLE OF INVENTION: Staphylococcus aureus Polynucleotides and Polypeptides
; FILE REFERENCE: PB560
; CURRENT APPLICATION NUMBER: US/09/925,637
; CURRENT FILING DATE: 2001-08-10
; PRIOR APPLICATION NUMBER: PCT/US00/23773
; PRIOR FILING DATE: 2000-08-31
; PRIOR APPLICATION NUMBER: US 60/151,933
; PRIOR FILING DATE: 1999-09-01
; PRIOR APPLICATION NUMBER: US 08/781,986
; PRIOR FILING DATE: 1997-01-03
; PRIOR APPLICATION NUMBER: US 08/956,171
; PRIOR FILING DATE: 1997-10-20
; PRIOR APPLICATION NUMBER: US 60/009,862
; PRIOR FILING DATE: 1996-01-06
; NUMBER OF SEQ ID NOS: 74
; SOFTWARE: Patent In Ver. 2.0
; SEQ ID NO 1
; LENGTH: 1318
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-925-637-1
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Query Match 95.7%; Score 1293.2; DB 9; Length 1318;
Best Local Similarity 99.0%; Pred. No. 3.7e-223;
Matches 1301; Conservative 0; Mismatches 13; Indels 0; Gaps 0;
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QY 22 ATGACACACTATCATTTTGTGCGAAATTAAGGTTCTGCGCATGAGTTCATTAGCCAAATC 81
Db 1 ATGACACACTATCATTTTGTGCGAAATTAAGGTTCTGCGCATGAGTTCATTAGCCAAATC 60
QY 82 ATGCATGATTTAGACACATGAAGTTCAAGATCGGATATTGAGAACTACGTATTACAGAA 141
Db 61 ATGCATGATTTAGACACATGAAGTTCAAGATCGGATATTGAGAACTACGTATTACAGAA 120
QY 142 GTTGCTCTTACAAATTAAGGGGATAAAAATATTACCATTTGGTGTCTTAATAACATAAAGAA 201
Db 121 GTTGCTCTTACAAATTAAGGGGATAAAAATATTACCATTTGGTGTCTTAATAACATAAAGAA 180
QY 202 GATATGTTAGTTATACAGGTAATGCAATTCGGAGTAGCCATGAAGAAATAGTACGTGCA 261
Db 181 GATATGTTAGTTATACAGGTAATGCAATTCGGAGTAGCCATGAAGAAATAGTACGTGCA 240
QY 262 CATCAATTTGAAATTTAGATGTTGTAAGTTATAAATGATTTTATAGGACAGATTTATGATCAA 321
Db 241 CATCAATTTGAAATTTAGATGTTGTAAGTTATAAATGATTTTATAGGACAGATTTATGATCAA 300
QY 322 TATACCTTCAGTCTGTAAGTGGTGCACATGTTGAAGAACTTCTACACAGGTTTATATCA 381
Db 301 TATACCTTCAGTCTGTAAGTGGTGCACATGTTGAAGAACTTCTACACAGGTTTATATCA 360
QY 382 CATGTTTATGAATGGTGATAAAGACCTTCAATTTTAAATTTGGTGTATGGCAGGATGGGA 441
Db 361 CATGTTTATGAATGGTGATAAAGACCTTCAATTTTAAATTTGGTGTATGGCAGGATGGGA 420
QY 442 TTGCTGAAAGTGAATTTTGGCTTTTGAAGGATGGAATATAGACGTCACCTTTTAAAT 501
Db 421 TTGCTGAAAGTGAATTTTGGCTTTTGAAGGATGGAATATAGACGTCACCTTTTAAAT 480
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502 TATAAACCTGATACGAAATATACAAATATGATTTGATTCGATCATCTGATTTTCAAA 561  
Db TATAAACCTGATACGAAATATACAAATATGATTTGATTCGATCATCTGATTTTAAA 540  
562 GATATTAATGATGTTTGTGATGATTCGAAATATGATTCGATCATCTGATTTTAAA 621  
Db GATATTAATGATGTTTGTGATGATTCGAAATATGATTCGATCATCTGATTTTAAA 600  
622 ATTGCTTTGGGTGATGATGATTCGAAATATGATTCGATCATCTGATTTTAAA 681  
Db ATTGCTTTGGGTGATGATGATTCGAAATATGATTCGATCATCTGATTTTAAA 660  
682 TATGATTTAAAGATTCGATGATTCGAAATATGATTCGATCATCTGATTTTAAA 741  
Db TATGATTTAAAGATTCGATGATTCGAAATATGATTCGATCATCTGATTTTAAA 720  
742 ACTGCTTTGGGTGATGATGATTCGAAATATGATTCGATCATCTGATTTTAAA 801  
Db ACTGCTTTGGGTGATGATGATTCGAAATATGATTCGATCATCTGATTTTAAA 780  
802 GGTGACCATACAGTTTAAATGATTCGAAATATGATTCGATCATCTGATTTTAAA 861  
Db GGTGACCATACAGTTTAAATGATTCGAAATATGATTCGATCATCTGATTTTAAA 840  
862 GATGTTTAAAGATTCGATGATTCGAAATATGATTCGATCATCTGATTTTAAA 921  
Db GATGTTTAAAGATTCGATGATTCGAAATATGATTCGATCATCTGATTTTAAA 900  
922 GAAATACCAATTCGATGATTCGAAATATGATTCGATCATCTGATTTTAAA 981  
Db GAAATACCAATTCGATGATTCGAAATATGATTCGATCATCTGATTTTAAA 960  
982 AGTGCTTAAATGATTCGATGATTCGAAATATGATTCGATCATCTGATTTTAAA 1041  
Db AGTGCTTAAATGATTCGATGATTCGAAATATGATTCGATCATCTGATTTTAAA 1020  
1042 CAACACACATCTCTAGATGATTCGAAATATGATTCGATCATCTGATTTTAAA 1101  
Db CAACACACATCTCTAGATGATTCGAAATATGATTCGATCATCTGATTTTAAA 1080  
1102 AAAGCAGATCGTGATTCGATGATTCGAAATATGATTCGATCATCTGATTTTAAA 1161  
Db AAAGCAGATCGTGATTCGATGATTCGAAATATGATTCGATCATCTGATTTTAAA 1140  
1162 TTAAGCATACAGATTCGATGATTCGAAATATGATTCGATCATCTGATTTTAAA 1221  
Db TTAAGCATACAGATTCGATGATTCGAAATATGATTCGATCATCTGATTTTAAA 1200  
1222 ATTAAATGATTCGATGATTCGAAATATGATTCGATCATCTGATTTTAAA 1281  
Db ATTAAATGATTCGATGATTCGAAATATGATTCGATCATCTGATTTTAAA 1260  
1282 CAAAAATACAAATGATTCGATGATTCGAAATATGATTCGATCATCTGATTTTAAA 1335  
Db CAAAAATACAAATGATTCGATGATTCGAAATATGATTCGATCATCTGATTTTAAA 1314

RESULT 7  
US-10-084-205-1  
; Sequence 1, Application US/10084205  
; Publication No. US20030049648A1  
; GENERAL INFORMATION:  
; APPLICANT: Choi, Gil  
; TITLE OF INVENTION: 37 Staphylococcus aureus Genes and Polypeptides  
; FILE REFERENCE: PB515P1  
; CURRENT APPLICATION NUMBER: US/10/084, 205  
; CURRENT FILING DATE: 2002-02-28  
; PRIOR APPLICATION NUMBER: PCT/US00/23773  
; PRIOR FILING DATE: 2000-08-31  
; PRIOR APPLICATION NUMBER: 60/151,933  
; PRIOR FILING DATE: 1999-09-01  
; NUMBER OF SEQ ID NOS: 74  
; SOFTWARE: PatentIn Ver. 3.1

; SEQ ID NO 1  
; LENGTH: 1318  
; TYPE: DNA  
; ORGANISM: Staphylococcus aureus  
US-10-084-205-1  
Query Match 95.7%; Score 1293.2; DB 15; Length 1318;  
Best Local Similarity 99.0%; Pred. No. 3.7e-223;  
Matches 1301; Conservative 0; Mismatches 13; Indels 0; Gaps 0;  
QY 22 ATGACACACTATCATTTTGTGCGAATTAAGGTTCTGGCATGAGTTCACTAGACAAATC 81  
Db 1 ATGACACACTATCATTTTGTGCGAATTAAGGTTCTGGCATGAGTTCACTAGACAAATC 60  
82 ATGCAATGATTTAGGACATGAAGTTCAAGATCGGATATTTAGCAACTTACGATTTACGAA 141  
Db 61 ATGCAATGATTTAGGACATGAAGTTCAAGATCGGATATTTAGCAACTTACGATTTACGAA 120  
142 GTTGTCTTTAGAAATTAAGGGATTAATAATTTACCAATTTGGTGTCTAATAACATAAAGAA 201  
Db 121 GTTGTCTTTAGAAATTAAGGGATTAATAATTTACCAATTTGGTGTCTAATAACATAAAGAA 180  
202 GATATGTTAGTTATATACAAAGTTAATGCAATTCGGAGTAGCCATGAAGAAATAGTAGTGA 261  
Db 181 GATATGTTAGTTATATACAAAGTTAATGCAATTCGGAGTAGCCATGAAGAAATAGTAGTGA 240  
262 CATCAATTCGAAATTAGATGTTGTAAGTTAATGATTTTATAGGACAGATTTATGATCAA 321  
Db 241 CATCAATTCGAAATTAGATGTTGTAAGTTAATGATTTTATAGGACAGATTTATGATCAA 300  
322 TATATCTCAGTAGCTGTAAGTTGTCGATGTCACATGTTAAACTTCTACACAGGTTTATATCA 381  
Db 301 TATATCTCAGTAGCTGTAAGTTGTCGATGTCACATGTTAAACTTCTACACAGGTTTATATCA 360  
382 CATGTTATCAATGCTGATTAATAAGACTTTCATTTTAAATTTGGTGTGATGCGACAGGATGGA 441  
Db 361 CATGTTATCAATGCTGATTAATAAGACTTTCATTTTAAATTTGGTGTGATGCGACAGGATGGA 420  
442 TTGCTTGAAGTGAATTTTTCGCTTTTGGGATGTCGATGTCACATGTCCTGATTTTAAAGT 501  
Db 421 TTGCTTGAAGTGAATTTTTCGCTTTTGGGATGTCGATGTCACATGTCCTGATTTTAAAGT 480  
502 TATAAACCTGATACGAAATATACAAATATGATTTGATTCGATCATCTGATTTTCAAA 561  
Db 481 TATAAACCTGATACGAAATATACAAATATGATTTGATTCGATCATCTGATTTTAAA 540  
562 GATATTAATGATGTTTGTGATGATTCGAAATATGATTCGATCATCTGATTTTAAA 621  
Db 541 GATATTAATGATGTTTGTGATGATTCGAAATATGATTCGATCATCTGATTTTAAA 600  
622 ATTGCTTTGGGTGATGATGATTCGAAATATGATTCGATCATCTGATTTTAAA 681  
Db 601 ATTGCTTTGGGTGATGATGATTCGAAATATGATTCGATCATCTGATTTTAAA 660  
682 TATGATTTAAAGATTCGATGATTCGAAATATGATTCGATCATCTGATTTTAAA 741  
Db 661 TATGATTTAAAGATTCGATGATTCGAAATATGATTCGATCATCTGATTTTAAA 720  
742 ACTGCTTTGGGTGATGATGATTCGAAATATGATTCGATCATCTGATTTTAAA 801  
Db 721 ACTGCTTTGGGTGATGATGATTCGAAATATGATTCGATCATCTGATTTTAAA 780  
802 GGTGACCATACAGTTTAAATGATTCGAAATATGATTCGATCATCTGATTTTAAA 861  
Db 781 GGTGACCATACAGTTTAAATGATTCGAAATATGATTCGATCATCTGATTTTAAA 840  
862 GATGTTTAAAGATTCGATGATTCGAAATATGATTCGATCATCTGATTTTAAA 921  
Db 841 GATGTTTAAAGATTCGATGATTCGAAATATGATTCGATCATCTGATTTTAAA 900  
922 CAAAAATACAAATGATTCGATGATTCGAAATATGATTCGATCATCTGATTTTAAA 981  
Db 901 GAAAAATACAAATGATTCGATGATTCGAAATATGATTCGATCATCTGATTTTAAA 960

Qy	982	AGTGCTACAAATTGACACAGCAACGAAAGAAATATCCACATTAAGAGAGTGTTCAGATATT	1041
Db	961	AGTGCTACAAATTGAAAACAGCACGAAAGAAATATCCACATTAAGAGAGTGTTCAGATATT	1020
Qy	1042	CAACACACACTTTCTCTAGAACACACAGCAATTTTAAATGAATTCGAGAAAGTTTATGT	1101
Db	1021	CAACACACACTTTCTCTAGAACACACAGCAATTTTAAATGAATTCGAGAAAGTTTATGT	1080
Qy	1102	AAAGCAGATCGTGTAATCTTATGTGAAATTTTGGCTCAATTTAGAGAAATTTCTGGCGCA	1161
Db	1081	AAAGCAGATCGTGTAATCTTATGTGAAATTTTGGCTCAATTTAGAGAAATTTCTGGCGCA	1140
Qy	1162	TTAAGCATACAGATTTAAATGATAAATTCGAGTGCATCGTTCATTAATCAAGATCTT	1221
Db	1141	TTAAGCATACAGATTTAAATGATAAATTCGAGTGCATCGTTCATTAATGAGATCTT	1200
Qy	1222	ATTAATGATTAGAACAAATTTGATAATGCTGTGTTTATTTATGGTGCAGGTGATATT	1281
Db	1201	ATTAATGATTAGAACAAATTTGATAATGCTGTGTTTATTTATGGTGCAGGTGATATT	1260
Qy	1282	CAAAAATTACAAAATGTCATATTAGATATAATTTAGGCATGAAAATGCGTTTAA	1335
Db	1261	CAAAAATTACAAAATGTCATATTAGATATAATTTAGGCATGAAAATGCGTTTAA	1314
RESULT 8			
US-10-712-713-1			
; Sequence 1, Application US/10712713			
; Publication No. US20040082002A1			
; GENERAL INFORMATION:			
; APPLICANT: Choi, Gil			
; TITLE OF INVENTION: 37 Staphylococcus aureus Genes and Polypeptides			
; FILE REFERENCE: PB515PI			
; CURRENT APPLICATION NUMBER: US/10/712,713			
; CURRENT FILING DATE: 2003-11-14			
; PRIOR APPLICATION NUMBER: US/10/084,205			
; PRIOR FILING DATE: 2002-02-28			
; PRIOR APPLICATION NUMBER: PCT/US02/23773			
; PRIOR FILING DATE: 2000-08-31			
; PRIOR APPLICATION NUMBER: 60/151,933			
; PRIOR FILING DATE: 1999-09-01			
; NUMBER OF SEQ ID NOS: 74			
; SOFTWARE: Patent In Ver. 3.1			
; SEQ ID NO 1:			
; TYPE: DNA			
; LENGTH: 1318			
; ORGANISM: Staphylococcus aureus			
US-10-712-713-1			
Query Match 95.7%; Score 1293.2; DB 17; Length 1318;			
Best Local Similarity 99.0%; Pred. No. 3.7e-223;			
Matches 1301; Conservative 0; Mismatches 13; Indels 0; Gaps 0;			
Qy	22	ATGCACACTATCATTTTGTGCGAATTAAGGTTCTGSCATGAGTTCAATAGCACAAATC	81
Db	1	ATGCACACTATCATTTTGTGCGAATTAAGGTTCTGSCATGAGTTCAATAGCACAAATC	60
Qy	82	ATGCATGATTAGACATGAAGTTCAAGGATCGGATTTAGAACTAGTATTACAGAA	141
Db	61	ATGCATGATTAGACATGAAGTTCAAGGATCGGATTTAGAACTAGTATTACAGAA	120
Qy	142	GTTCCTCTAGAAATTAAGGGATTAATATATTTACCAATTTGGTCTTAATAAATCAATAAGAA	201
Db	121	GTTCCTCTAGAAATTAAGGGATTAATATATTTACCAATTTGGTCTTAATAAATCAATAAGAA	180
Qy	202	GATATGTTAGTTATACAGAGTAATGCATTCGAGTAGCCATGAAAGAAATAGTAGTGA	261
Db	181	GATATGTTAGTTATACAGAGTAATGCATTCGAGTAGCCATGAAAGAAATAGTAGTGA	240
Qy	262	CATCAATGAAATTAGATGTTGTAAGTTAATAGATTTTATAGGACAGATTTATGATCAA	321
Db	241	CATCAATGAAATTAGATGTTGTAAGTTAATAGATTTTATAGGACAGATTTATGATCAA	300

Qy	322	TATACCTCAGTAGCTTAACATGCTGTCACATGCTTAACCTCTACACAGGTTTATATCA	381
Db	301	TATACCTCAGTAGCTTAACATGCTGTCACATGCTTAACCTCTACACAGGTTTATATCA	360
Qy	382	CATGTTATGAATGCTGATAAAGAGACTTCATTTTAAATGGTGTGAGGACACAGTATGGA	441
Db	361	CATGTTATGAATGCTGATAAAGAGACTTCATTTTAAATGGTGTGAGGACACAGTATGGA	420
Qy	442	TTGCCCTGAAGATGATATTATTCGCTTTTGGAGCATGTGAATATAGAGCTCATCTTTTAAGT	501
Db	421	TTGCCCTGAAGATGATATTATTCGCTTTTGGAGCATGTGAATATAGAGCTCATCTTTTAAGT	480
Qy	502	TATAAACCTGATTAACGCAATTAATGACAAATATGATTTTCGATCATCTCTGATTTTCAA	561
Db	481	TATAAACCTGATTAACGCAATTAATGACAAATATGATTTTCGATCATCTCTGATTTTCAA	540
Qy	562	GATATTAAATGATGTTTTCGATCATTTCCAAAGAAATGGCACAATAATGTTTAAAAAGGTATT	621
Db	541	GATATTAAATGATGTTTTCGATCATTTCCAAAGAAATGGCACAATAATGTTTAAAAAGGTATT	600
Qy	622	ATTGCTTGGGGTGATGATGAACATCTACGTAATAATTTGAAGCAGATGTTTCCAAATTTATC	681
Db	601	ATTGCTTGGGGTGATGATGAACATCTACGTAATAATTTGAAGCAGATGTTTCCAAATTTATC	660
Qy	682	TATGGATTTAAAGATTCGGATGACATTTATGCTCMAAATATTCAAATTTACGGATAAAGGT	741
Db	661	TATGGATTTAAAGATTCGGATGACATTTATGCTCMAAATATTCAAATTTACGGATAAAGGT	720
Qy	742	ACTGCTTTTGTGATGTTGATGAGTGTGATGTTTATGATGATCACTTCTCTGCTCCACAATAT	801
Db	721	ACTGCTTTTGTGATGTTGATGAGTGTGATGTTTATGATGATCACTTCTCTGCTCCACAATAT	780
Qy	802	GGTGACCATACAGTTTAAATGCAATGATGCTGTAATTCGATTTAGTATTTAGAGAGCTA	861
Db	781	GGTGACCATACAGTTTAAATGCAATGATGCTGTAATTCGATTTAGTATTTAGAGAGCTA	840
Qy	862	GATGTTTAAATATTAAGAGCATTAGAAACGTTTGGTGGTGTGTTAAACGTCGTTTCAAT	921
Db	841	GATGTTTAAATATTAAGAGCATTAGAAACGTTTGGTGGTGTGTTAAACGTCGTTTCAAT	900
Qy	922	GAACTACAAATTCGAAATCAAGTTTATTTAGATGATTTATGCACACCATCCCAAGAGAAAT	981
Db	901	GAACTACAAATTCGAAATCAAGTTTATTTAGATGATTTATGCACACCATCCCAAGAGAAAT	960
Qy	982	AGTGCTACAATTGACACAGCAAGAAATATCCACATAAGAGAGTGTGTCAGTATT	1041
Db	961	AGTGCTACAATTGAAAACAGCACGAAAGAAATATCCACATAAGAGAGTGTGTCAGTATT	1020
Qy	1042	CAACACACACTTTCTCTAGAACACAGCAATTTTAAATGAATTTGCAGAAAGTTTATGT	1101
Db	1021	CAACACACACTTTCTCTAGAACACAGCAATTTTAAATGAATTTGCAGAAAGTTTATGT	1080
Qy	1102	AAAGCAGATCGTGTAATCTTATGTGAAATTTTGGCTCAATTTAGAGAAATTTCTGGCGCA	1161
Db	1081	AAAGCAGATCGTGTAATCTTATGTGAAATTTTGGCTCAATTTAGAGAAATTTCTGGCGCA	1140
Qy	1162	TTAAGCATACAGATTTAAATGATAAATTCGAGTGCATCGTTCATTAATCAAGATCTT	1221
Db	1141	TTAAGCATACAGATTTAAATGATAAATTCGAGTGCATCGTTCATTAATGAGATCTT	1200
Qy	1222	ATTAATGATTAGAACAAATTTGATAATGCTGTGTTTATTTATGGTGCAGGTGATATT	1281
Db	1201	ATTAATGATTAGAACAAATTTGATAATGCTGTGTTTATTTATGGTGCAGGTGATATT	1260
Qy	1282	CAAAAATTACAAAATGTCATATTAGATATAATTTAGGCATGAAAATGCGTTTAA	1335
Db	1261	CAAAAATTACAAAATGTCATATTAGATATAATTTAGGCATGAAAATGCGTTTAA	1314

RESULT 9  
US-10-282-122A-34994  
; Sequence 34994, Application US/10282122A

RESULT 10  
US-09-939-980-179/c  
; Sequence 179, Application US/09939980  
; Patent No. US2002082234A1  
; GENERAL INFORMATION:  
; APPLICANT: Black, Michael

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: Publication No. US20040029129A1
:
: GENERAL INFORMATION:
: APPLICANT: Wang, Liangsu
: APPLICANT: Zamudio, Carlos
: APPLICANT: Malone, Cheryl
: APPLICANT: Haselbeck, Robert
: APPLICANT: Ohlsen, Kari
: APPLICANT: Zyskind, Judith
: APPLICANT: Wall, Daniel
: APPLICANT: Trawick, John
: APPLICANT: Carr, Grant
: APPLICANT: Yamamoto, Robert
: APPLICANT: Forsyth, R.
: APPLICANT: Xu, H.
:
: TITLE OF INVENTION: Identification of Essential Genes in Microorganisms
:
: FILE REFERENCE: ELITRA.034A
: CURRENT APPLICATION NUMBER: US/10/282,122A
: CURRENT FILING DATE: 2003-02-20
: PRIOR APPLICATION NUMBER: 60/191,078
: PRIOR FILING DATE: 2000-03-21
: PRIOR APPLICATION NUMBER: 60/206,848
: PRIOR FILING DATE: 2000-05-23
: PRIOR APPLICATION NUMBER: 60/207,727
: PRIOR FILING DATE: 2000-05-26
: PRIOR APPLICATION NUMBER: 60/230,335
: PRIOR FILING DATE: 2000-09-06
: PRIOR APPLICATION NUMBER: 60/230,347
: PRIOR FILING DATE: 2000-09-09
: PRIOR APPLICATION NUMBER: 60/242,578
: PRIOR FILING DATE: 2000-10-23
: PRIOR APPLICATION NUMBER: 60/253,525
: PRIOR FILING DATE: 2000-11-27
: PRIOR APPLICATION NUMBER: 60/257,931
: PRIOR FILING DATE: 2000-12-22
: PRIOR APPLICATION NUMBER: 60/267,636
: PRIOR FILING DATE: 2001-02-09
: PRIOR APPLICATION NUMBER: 60/269,308
: PRIOR FILING DATE: 2001-02-16
: Remaining Prior Application data removed - See File Wrapper or PALM.
: NUMBER OF SEQ ID NOS: 78614
:
: SOFTWARE: PatentIn version 3.1
: SEQ ID NO 34994
: LENGTH: 1311
: TYPE: DNA
: ORGANISM: Staphylococcus epidermidis
:
: US-10-282-122A-34994
:
: Query Match 67.1%; Score 906.2; DB 13; Length 1311;
: Best local Similarity 80.7%; Pred. No. 1.6e-153; Indels 0; Gaps 0;
: Matches 1058; Conservative 0; Mismatches 253;
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: Qy 22 ATGACACACATCATATTTGTGCGGAATTAAAGGTTCTGCGCATGAGTTCAAGTCAAAATC 81
: Db 1 ATGACACATCATCATTTTGTGCGGAATTAAAGGTCAGGCATGAGTTCATTAGCAAAATC 60
:
: Qy 82 ATGCATGATTTAGACATGAAGTTCAGAGTCGGNATTTGAGAACTAGCTATTTACAGAA 141
: Db 61 ATGCATGACCTTCGCTCATGAGTACAAAGGTCAGACATAGAAATCATACGTTTTACAGAA 120
:
: Qy 142 GTTCTCTTTAGAAATAAGGAGTAAATAATTTACCATTGTGTCCTTAATACATTAAGAA 201
: Db 121 GTTGCAATTAAGAAATAAGGGAATTAATAATTTACCTTTTGATGCAATAATATTACAAA 180
:
: Qy 202 GATATGGTAGTTATACAGGTAATGCATTCGGAGTAGGCATGAGAAATAGTAGTGCAT 261
: Db 181 GAAATGGTTGTTCATCCAAGGTAATCCATTTCTGTAATAATCATGAAGAAATTTTAGGGCA 240
:
: Qy 262 CATCAATTTGAATTTAGATCTTCTGTAAGTTATATGATTTTTTAGGCACAGATTTTCATCAA 321
: Db 241 CATGAATTTAAGCGTTGATTAATAAAATCATGACCTTCTGGTCACTGTTATAAATCA 300
:
: Qy 322 TATACCTTCAGTAGCTGTAACTGGTCAGCATGGTAAACCTCTTACAAACAGGTTTATTATCA 381

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US-10-282-122A-10147									
Query Match 43.6%; Score 589.6; DB 13; Length 1308;									
Best Local Similarity 56.0%; Pred. No. 1.6e-96;									
Matches 853; Conservative 0; Mismatches 439; Indels 0; Gaps 0;									
QY	22	ATGACACACTATTCATTTCTCGGAATTAAGGTTCTGGCATAGTTCATTTAGCACAATC	81						
DB	1	ATGACAGTTTACATTTTGTAGGANTTAAGNACAGGAATGATTCATTCAGCGCAAT	60						
QY	82	ATGACATGATTAGGACATCAAGGTTCAAGGATCGGATATTGAGACACTACGTTATTACAGAA	141						
DB	61	CTTCATGACATGAGCATACTGTTCAAGGCTCGATTATGAAGGCGTTTCTTTACACAA	120						
QY	142	GTTCCTCTTAGAATAAGGGGATAAAGATTTACCAATTTGCTCTAATACATAAAGAA	201						
DB	121	ACAGCGTTGGAAGGTAATATCTCGATTCCTTTGATAAAGTAATGATAAGAA	180						
QY	202	GTATGTTAGTATACAGGTAATGATTCGCGAGTAGCCATGAAGAAATAGTACGTGCA	261						
DB	181	GGACAAGTGATTATTCGAGGAATATGATTTCTTGATACGCAI GAAGAAATCGTAGACCA	240						
QY	262	CATCAATTTGAAATTAGATGTTGAAGTTTAAATGATTTTATGACAGATTTATGATCAA	321						
DB	241	AAAGAAATTAACATCCAGTACATCGTTTACCATCATCTTCTAGTGTATCTTATGAACCA	300						
QY	322	TATACCTCAGTGTAGTGTACGTGCAATGCTGTAACATTTCTCAACAGGTTTATTATCA	381						
DB	301	TACACAACTGTTGCTGTAACTGCTGCGTGTGCAATCAACAACTGTTGTTAGCC	360						
QY	382	CATGTTATGATGTTGATAAAGAACTTCATTTTAAATGCTGATGCGACAGGTATGGGA	441						
DB	361	CA-GTAATGCAAGTGCACACCTTACATCTTACCTTATGAGATGGAACAGGCAATGGG	420						
QY	442	TTGCTCTGAAAGTGAATTTTGGCTTTTGGAGCATGTGAATATAGACGTCACTTTTAAAT	501						
DB	421	GTAGAAATAGTAAGTATTTGTTATTTGAAGCTTGTGAGTATCGTCTCATTTCTGTCT	480						
QY	502	TATAACTGATTAAGTATGATGACAAATTTGATTTCTGATCATCTGATTTATTTCAA	561						
DB	481	TACAATCCAGACTATGCAATTTATGACAAATTTGATTTGATCATCTGATTTATTTCA	540						
QY	562	GATATTAATGATTTTGTGATGCAATTTCAAGAAATGCGACATAATGTTTAAAGAGTAT	621						
DB	541	GATATCAAGTATTTTACGTGCAATTTCAAGGATGCAATTTGCAATTTGCAATTTTCA	600						
QY	622	ATTGCTTTGGGTGATGATGACATCTAGTAAATTTGAAGCAGATTTTCCAAATTTATAC	681						
DB	601	ATTGCAATGCGAGATGATGAAGAACTTCAAAATTTCAAGCGAAGTACCTGTTATTTTC	660						
QY	682	TATGATTTAAGATTCGGATGACATTTTATGCTCAAAATTTCAATTTACGATTAAGGT	741						
DB	661	TATGATTTGAGAGATTAATGATTTTCAAGCAGATTAATTTCAAGGAGTACGCGT	720						
QY	742	ACTGCTTTGATGTTGATGATGATGATGATGATGATGATGATGATGATGATGATGAT	801						
DB	721	ACTATTTTCGATGATTTGTTGTTGTTGTTGTTGTTGTTGTTGTTGTTGTTGTTGTT	780						
QY	802	GGTGACCATACAGTTTAAATGATGATGATGATGATGATGATGATGATGATGATGAT	861						
DB	781	GGCAACACAGCGTATTAATGATGATGATGATGATGATGATGATGATGATGATGAT	840						
QY	862	GATGTTACAAATTTAAGAGCAATTTAGAAAGCTTTGTTGTTGTTGTTGTTGTTGTT	921						
DB	841	GATGTTAGAGCAATTTAAGCAATTTAAGCAATTTAAGCAATTTAAGCAATTTAAG	900						
QY	922	GAACTACAAATTTGCAATCAAGTATTTGATGATGATGATGATGATGATGATGATGAT	981						
DB	901	GAAAGCCCAATTTGGAGAGCAAGTATTTTATGATGATGATGATGATGATGATGATGAT	960						
QY	982	AGTGTCTACAAATTTGACACAGCAAGAAATTTCCACATTAAGAGTGTGTTGATGAT	1041						
DB	961	AATGCAACCTTGAAGCAGCTCTGCTCAAAATTTCAAGAGCGTGAATTTGCTGTATTC	1020						

QY	1042	CAACACACACATTTCTCTAGAACACAGCAATTTTAAATGATTTTTCAGAAAGTTTATGT	1101						
DB	1021	CAGCGCACACATTTCTCAGCTACAGAAAGTTCTCTAGATGATTCGCTGAAAGCTTAGC	1080						
QY	1102	AAAGCAGATCGTATTTCTTATGCTGAAATTTTGGCTCAATTTAGAGAAATTTCTGGGSCA	1161						
DB	1081	AAAGCTGACCAAGTATCTTATGATTTTTCGATCAGCGCGGAAACAAAGGTGAA	1140						
QY	1162	TTAAACGATCAAGATTTAAATTTGATAAATTTGAGGTCATGCTTCAATTAATGAAGATCTT	1221						
DB	1141	TTAAACATCAAGATCTGCAAAAGCTTATGACGCTCAGAACTAATTTACAGATACACA	1200						
QY	1222	ATTAAGTATTTAGAACAAATTTGATGCTGTTGTTTATTTATGCTGCGGAGGTGATTT	1281						
DB	1201	ACGATGATTTAAGAAACATATAAAGCGGCTTCTCATTTTCATGCGCGGAGGACATC	1260						
QY	1282	CAAAATTTCAAAATGATATTTAGATAAAT	1313						
DB	1261	CAAAATTTCAAGACGCTTACGTTAAAGAGT	1292						

RESULT 12

US-09-815-242-6773

Sequence 6773, Application US/09815242

Patent No. US20020061569A1

GENERAL INFORMATION:

APPLICANT: Haselbeck, Robert

APPLICANT: Ohlsen, Kari L.

APPLICANT: Zyskind, Judith W.

APPLICANT: Wall, Daniel

APPLICANT: Trawick, John D.

APPLICANT: Carr, Grant J.

APPLICANT: Yamamoto, Robert T.

APPLICANT: Xu, H. Howard

TITLE OF INVENTION: Identification of Essential Genes in

TITLE OF INVENTION: Prokaryotes

FILE REFERENCE: ELITRA.011A

CURRENT APPLICATION NUMBER: US/09/815,242

CURRENT FILING DATE: 2001-03-21

PRIOR APPLICATION NUMBER: 60/191,078

PRIOR FILING DATE: 2000-03-21

PRIOR APPLICATION NUMBER: 60/206,848

PRIOR FILING DATE: 2000-05-23

PRIOR APPLICATION NUMBER: 60/207,727

PRIOR FILING DATE: 2000-05-26

PRIOR APPLICATION NUMBER: 60/242,578

PRIOR FILING DATE: 2000-10-23

PRIOR APPLICATION NUMBER: 60/253,625

PRIOR FILING DATE: 2000-11-27

PRIOR APPLICATION NUMBER: 60/257,931

PRIOR FILING DATE: 2000-12-22

PRIOR APPLICATION NUMBER: 60/269,308

PRIOR FILING DATE: 2001-02-16

NUMBER OF SEQ ID NOS: 14110

SOFTWARE: FastSeq for Windows Version 4.0

SEQ ID NO 6773

LENGTH: 1371

TYPE: DNA

ORGANISM: Enterococcus faecalis

FEATURE:

NAME/KEY: CDS

LOCATION: (1)...(1371)

US-09-815-242-6773

Query Match 41.0%; Score 553.4; DB 9; Length 1371;

Best Local Similarity 54.7%; Pred. No. 5.2e-90;

Matches 840; Conservative 0; Mismatches 456; Indels 3; Gaps 1;

QY	31	TATCATTTTGTTCGGAATTAAGGTTCTGCGATGAGTTTCAATTAACATCATGATGAT	90						
DB	58	TACCATTTTGTTCGGAATTAAGGTTCTGCGATGAGTTTCTGCGATGAGTTTGTGTTACACCA	117						



QY 91 TTAGGACATGAGTTCAAGGTCGGATATTCAGAACTAGCTATTTTACAGAGTTGCTCTT 150  
Db 118 AAAGGCTACAACTGTTCAAGGATCAGATGTAAGAGATTTTCTTTTACAAAGCGGACTT 177  
QY 151 AGAATAAGGGGATAAAATAATTAACCTATTTGGTCTTAATACATATAAAGAGATATGGTA 210  
Db 178 GAAATAACAGGTGTCCTTATTTTACCAATTAATGACATATAATTTATGATAAGACATGAT 237  
QY 211 GTTATACAGTAATAGCATTCGAGTAGCCATGAGAAATAGTACGTGACATCAATTG 270  
Db 238 GTTATGCTGAAATGCTTTTCCAGATACCCATGAGAAATCGCCGCGCCATCGAATTA 297  
QY 271 AAATTAGATGTTGTAAGTTAATGATTTTATGACACAGATTTATGATCAATATACCTCA 330  
Db 298 GGCACAGAGTAATTTGGTTTACCCAGATTTCAATGCTGTTTATGACACCGTACACAGC 357  
QY 331 GTAGCTGTAACCTGGTGCACATGCTGTAACCTCTCAACACAGGTTTATTTATCATGTTTATG 390  
Db 358 ATTGCTGTAAAGGCTCACATGGGAACAAGTACGACTGGTTGCTAGCACATGATTA 417  
QY 391 AATGCTGTAATAAGACTTCAATTTTATTTGGTGTGTCACAGGATGCGATGCTGTA 450  
Db 418 AGTGTATCAATCCAACTAGTTTATTTAATAGGGATGCGACTGGCCGCGGAAACCGAT 477  
QY 451 AGTGATTTTTCGCTTTTGGAGCATGCAATATACAGCTCACTTTTAAAGTTATATAAAGCT 510  
Db 478 GCTGATTTCTTTGGCATTTTGAAGCGTGTGAATATCCGCTCATTTCTTGGCTTATTCACCA 537  
QY 511 CATTTACGCAATTTATGACAAATTTGATTTTCGATCTCTGATCTCTGATTTTCAAGATTTAAT 570  
Db 538 GATTTATGCAATTTATGACGAATATGATTTTGTATCTCAGATTTACTACAAGAGCATTTGAG 597  
QY 571 GATGTTTGTGATGCAATTCAGAAATGCGACATATGTTTAAAGAGTATTTATGCTTGG 630  
Db 598 GACGTTTTTTCAGCGTTTCCAAATATGCTCATCAAGTCAAAATAAGAAATTTTGTCTTAT 657  
QY 631 GGTGATGATGACACTAGTAAATTTGAAGCAGATGTTCCAAATTTATTTACTATGATTT 690  
Db 658 GGTGATGATGATGATCTTCGCGAGTTAGATCAGAAAGTCCAGTTTATTTATGCGCTC 717  
QY 691 AAAGATTCGGATGACATTTATGCTCAAAATATTTCAAAATTCGATTAAGGTAAGCTGCTTTT 750  
Db 718 ACCGAAGAGATGATATCCAGCCGGAATATTTCAAGAAACAGGAGGCTCATCTTTT 777  
QY 751 GATGATGATGAGTGGATGATTTATGATGATCTCTCTCTCCAAATATGTTGACCAT 810  
Db 778 GATGTTTATCAAGAGCTGATTTTGTAGTCTATTTTGTCTTACCAAGCATTTGGCCATCAC 837  
QY 811 ACAGTTTAAATGCAATTTAGCTGTAATTCGATTTAGTTATTTATGAGAGAGCTAGATGTTACA 870  
Db 838 AATATCATGAATGCGCTAGGTGATTTGCTGTGCTTATTTTGAATACTTGATATGCAA 897  
QY 871 AATATTAAGAAGCAATTAAGAAAGTTTGGTGGTGTAAACGTCGTTTCAATGAACTACA 930  
Db 898 AAAGTCGACAGAAATGCTAAGTTTAAAGGTTGAAACGTCGTTTATGCGGAGAAAAA 957  
QY 931 ATTGCAATCAAGTTATTTAGATGATTTATGACACATCCAGAGATTTAGTGTCTACA 990  
Db 958 GTCAAGTCAATGATTTATTTGATGATTTATGCGCACTCCAGCTGAAATTAAGCAACG 1017  
QY 991 ATTGACACAGCAGAAAGAAATATCCACATCAAGAAAGTTTGTTCAGTATTTTCAACACAC 1050  
Db 1018 ATTGATGGGCGCCGCAAAATATCTGACAAAGAAATTTATGCTGTCTTCCAGCCACAT 1077  
QY 1051 ACTTTCTCTAGAACACACAGCAATTTTAAATGAAATTTGCGAAAGTTTATGCTAAAGCAGAT 1110  
Db 1078 ACATTTACAGAACAAATGCTTAAATGATGATTTTGTCTGAAGCACTGATTTTGGCAGAT 1137  
QY 1111 CGTGATTTCTTATGTAATTTTGGCTCAATTAGAGAAATTTCTGGCGCAATTAACGATA 1170  
Db 1138 GAAGTATTTCTTATGTAATTTTGGCTCTGCGCGTGAACACAAAGCCGAGGACGATTT 1197  
QY 1171 CAGATTTTAAATGATAAAATTT---GGAGGTGCTGTTTCAATTAATGAAGATCTTATTAAT 1227

Db 1198 GAAGATTTAGGTGAAAAAATTCAAAAAGGTGGACAGTAATTTACCGAAGATAATGTGCG 1257  
QY 1228 GTATTAGCAATTTGATAATGCTGTTGTTTATTTATGGGTGACAGGTGATATTCCAAAA 1287  
Db 1258 CCTTACTAGATTTTGAATAATGAGAGTGTCTTTATTTGGGTGCTGGCGACGTTTCAAAA 1317  
QY 1288 TTCAAAATGATATTTAGATAAATTTAGGCATGAAAAAT 1326  
Db 1318 TTTGACAAAGCTACGAAACATTTACTAAGTAACACAACT 1356  
RESULT 13  
US-10-282-122A-21122  
; Sequence 21122, Application US/10282122A  
; Publication No. US20040029129A1  
; GENERAL INFORMATION:  
; APPLICANT: Wang, Liangsu  
; APPLICANT: Zamudio, Carlos  
; APPLICANT: Malone, Cheryl  
; APPLICANT: Haselbeck, Robert  
; APPLICANT: Ohlsen, Kari  
; APPLICANT: Zyskind, Judith  
; APPLICANT: Wall, Daniel  
; APPLICANT: Trawick, John  
; APPLICANT: Carr, Grant  
; APPLICANT: Yamamoto, Robert  
; APPLICANT: Forsyth, R.  
; APPLICANT: Xu, H.  
; TITLE OF INVENTION: Identification of Essential Genes in Microorganisms  
; FILE REFERENCE: ELITRA-034A  
; CURRENT APPLICATION NUMBER: US/10/282,122A  
; CURRENT FILING DATE: 2003-02-20  
; PRIOR APPLICATION NUMBER: 60/191,078  
; PRIOR FILING DATE: 2000-03-21  
; PRIOR APPLICATION NUMBER: 60/206,848  
; PRIOR FILING DATE: 2000-05-23  
; PRIOR APPLICATION NUMBER: 60/207,727  
; PRIOR FILING DATE: 2000-05-26  
; PRIOR APPLICATION NUMBER: 60/230,335  
; PRIOR FILING DATE: 2000-09-06  
; PRIOR APPLICATION NUMBER: 60/230,347  
; PRIOR FILING DATE: 2000-09-09  
; PRIOR APPLICATION NUMBER: 60/242,578  
; PRIOR FILING DATE: 2000-10-23  
; PRIOR APPLICATION NUMBER: 60/253,625  
; PRIOR FILING DATE: 2000-11-27  
; PRIOR APPLICATION NUMBER: 60/257,931  
; PRIOR FILING DATE: 2000-12-22  
; PRIOR APPLICATION NUMBER: 60/267,636  
; PRIOR FILING DATE: 2001-02-09  
; PRIOR APPLICATION NUMBER: 60/269,308  
; PRIOR FILING DATE: 2001-02-16  
; Remaining Prior Application data removed - See File Wrapper or PALM.  
; NUMBER OF SEQ ID NOS: 78614  
; SOFTWARE: PatentIn version 3.1  
; SEQ ID NO 21122  
; LENGTH: 1335  
; TYPE: DNA  
; ORGANISM: Enterococcus faecalis  
US-10-282-122A-21122  
Query Match 40.8%; Score 551.8; DB 13; Length 1335;  
Best Local Similarity 64.6%; Pred. No. 1e-89;  
Matches 839; Conservative 0; Mismatches 457; Indels 3; Gaps 1;  
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QY 91 TTAGGACATGAGTTCAAGGATCGGATATTGAGAACTATTTAGAAAGTATTTTACAGAGTTGCTCTT 150  
Db 85 AAAGGCTACAACTGTTCAAGGATCGGATATTGAGAACTATTTTCTTTTACACAGGATCTT 144

QY	151	AGAAATTAAGGGGATATAAATATTACCATTTGGTGCTTAATAACATATAAAGAAAGATATGGTA	210
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QY	211	GTTATACAAAGGTAAATGCTCGAGTAGCCATGAAGAAATAGTAGCTGCACATCAATATG	270
Db	205	GTTATTGCTGGAAATGCTTTTCCAGATACCCATGAGGAATCCCGCGCCATCGAATTA	264
QY	271	AAATTAGATTGTTGTAAGTTATATATGATTTTAAATGGTGAAGGACAGATTAATGATCAATATCTTCA	330
Db	265	GGCGCAAGATANTCGTTACCAAGATTTCATTTGCTGTTTATCGAACCGTACACAAAGC	324
QY	331	GTACGTGTAACCTGGTGACATGTTAAACTTTCTACACAGGTTTATATACACATGTTATG	390
Db	325	ATTGCTGTAACAGGTCACATGGGAAACAAAGTACGACTGGTTTGTGTAGCACATGTTATTA	384
QY	391	AATGGTGATAAAGACTTCATTTTAAATGGTGAAGGACAGGTATGGGATTCCTGTAA	450
Db	385	AGTGGTATCAATCCAACTAGTTATTTAAATAGGGATGGCTGCTGCCACGGGACACAGAT	444
QY	451	AGTGATTATTTGCTTTTGGAGCATGTGAATATAGACGTCACTTTTAAAGTTATAAACCCT	510
Db	445	CCTGATTCTTTGCAATTTGAAGCGTGTGAGTATCCCGTCACTTTCTTTGGCTTATTCACCA	504
QY	511	GATTAGCAATATGACAAATATTGATTTCGATCATCTGATTAATTTCAAAGATATTAAT	570
Db	505	GATTATCGGATATGACGAATATCGATTTTATCATCCAGATTACTACAGAGCATTTGAG	564
QY	571	GATGTTTTCATGCTTCCAAAGAAATGGCACATAATGTTTAAAGAGTTATTTGCTTTG	630
Db	565	GACGTTTTTTCAGGTTTCCAAACAAATGGCTCATCBAGTCBAAAAGGAATTTTGTCTAT	624
QY	631	GGTGATGATGAACATCTACGTAAATTTGAACAGATGTTCCAAATTTATACATGTTGAT	690
Db	625	GGTGATGATGATATCTTCGCCAGTTAGATATCAGAAAGTGCAGTTTATTTATGCGGCTC	684
QY	691	AAAGATTGGATGATGATTTGCTCAAAATTTCAAAATTTACGATTAAGGTTACTGTTTT	750
Db	685	AGCGAAGAGGATGATATCCAAAGCCGAAATATTCACGAAACAAACGGAAGGCTCATCTTT	744
QY	751	GATGTTGATGATGATGATGATTTTATGATCATCTTCCTGCTCTCCAAATATGTTGACCAT	810
Db	745	GATGTTTATCAAGAGATGATTTTGTAGTCAATTTGCTTACCAAGCATTTGGCCATCAC	804
QY	811	ACAGTTTAAATGCAATAGCTGTAATGCGATTAGTTTATTTAGAGAGCTAGATGTACA	870
Db	805	AATATCATGAATGCGCTAGGTGATGCTGCTGCTGCTTATTTGAAAGAACTTGATATGCAA	864
QY	871	AATATTAAGAGCAATTAGAAACGTTTGGTGCTTTAAACGTCGTTTCAATGAAGCTACA	930
Db	865	AAAGTCGAGAAAGAAATGCTAAGTTTAAAGTGTAACGTCGTTTATAGCGAAGAA	924
QY	931	ATTGCAAAATCAAGTTTATTTAGATGATTAATGCAACATCCAAAGAGAAATTTAGTGCTCA	990
Db	925	GTCAGTGACATGATTTTGTGTTGATGATTAATGCGACCATCCAGCTGAAATTTAAAGCAAG	984
QY	991	ATTGACACAGCAGAAAGAAATATCCAAATAAGAAAGTTGTTGACAGTTTTCACCAACAC	1050
Db	985	ATTGATGCGCTGCGCCAAAATATCCAGCAAGAAATTTATGCTGCTTCCAGCCACAT	1044
QY	1051	ACTTTCCTTAGAACACAGCAATTTTAAATGAATTTGCAGAAAGTTTATGTAAGACAGAT	1110
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QY	1111	CGTGATTTCTTAGTGAATTTTGGCTCAATTAGAGAAATTTCTGGCGCATTAACGATA	1170
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QY	1171	CAAGATTTAATGATAAATTT---GGAGGTGCTATGTTCAATTAATGAAGATCTTATTAAT	1227
Db	1165	GAAGATTTAGTGAAAGAAATTTCAAAGAGGTTGACAAAGTAATTTACCGAAGATAATGTTGTC	1224

1228 GTATTAGAACAAATTCGATTAATGCTGTGTTTATTATTCGGTGCAGTGATATTCAAAAA 1287

1225 CCTTACTAGATTTTGAAATGCGATGGTGGTCTTTATGGGTCTTGGCAGCTTCAGAAA 1284

1288 TTACAAATGCGATTTTAGATAAATTAGGCATCAAAAAAT 1326

1285 TTTGAACAAGCTTACGAACATTTACTAAGTAACACAACT 1323

RESULT 14

US-10-398-221-2058/c ; Sequence 2058, Application US/10398221

Publication No. US2004008514A1

GENERAL INFORMATION:

APPLICANT: KUNST, Frederik

APPLICANT: GLASER, Philippe

TITLE OF INVENTION: Listeria innocua, genome and applications

FILE REFERENCE: 344 702 - US

CURRENT APPLICATION NUMBER: US/10/398,221

CURRENT FILING DATE: 2003-03-27

PRIOR APPLICATION NUMBER: PCT/FR 01/03 061

PRIOR FILING DATE: 2001-10-04

PRIOR APPLICATION NUMBER: FR 00/12 697

PRIOR FILING DATE: 2000-10-04

NUMBER OF SEQ ID NOS: 4025

SOFTWARE: PatentIn version 3.0

SEQ ID NO 2058

LENGTH: 3011208

TYPE: DNA

ORGANISM: Listeria innocua

US-10-398-221-2058

Query Match 39.3%; Score 531.2; DB 16; Length 3011208;

Best Local Similarity 62.2%; Pred. No. 8-8e-85;

Matches 836; Conservative 0; Mismatches 508; Indels 0; Gaps 0;

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QY 67 TCATTAGACAAATCATGCTATTTAGACATGAAGTTCAAGGATCGGATATTTGAGAAC 126

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QY 127 TAGCTATTACAGAGTTGCTCTTTAGAAATAGGGGTAAGAAATATACCATTTGTGCT 186

Db 1657928 TATTTTTCACGACAGAAAGCATTTGGAAGAAACAAATTTCCAAATTAAGCTTTTCAGCG 1657869

QY 187 AATACATTAAGAAAGATATGTTAGTATACAAAGGTAATGCAATTCGCGAGTAGCCATGAA 246

Db 1657868 GATAATATAAGAAAGGCTTAACATTTTGTGGTAATGCTATTCAGATACACATGAA 1657809

QY 247 GAAATAGTACGTGCAATCAATTTGAATTTAGATTTGTTGAAGTTATTAATTTTATTTAGGA 306

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QY 307 CAGATTATGATCAATATATCTTCGATGCTGTAATCTGGTGCACATGTTAAACCTTCACCA 366

Db 1657748 CAATTAATAGATGGCTATACAGTATTTGCAATTAAGTGGTTCTCATGTTAAACATCCACA 1657689

QY 367 ACAGGTTTATATACATGTTATGAATGTTGATAAAAGAACTTCATTTTAAATTTGTTGAT 426

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QY 487 GGTCACTTTTAAAGTTATAAACCTGATTACGCAATTAAGCAATATTTGATTTTCGATCAT 546

Db 1657568 CGCCATTTCTTCGTGACAAACCAACTTATGCAATTAATGCAACATTTGCTGGATCAGC 1657509

QY 547 CCTGATTATTTTCAAGATATTAATGATGTTTGTGATGCAATTTCCAAAGAAATGGCAAT 606

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Db 1657508 CCAGATTATTTCAAGACGGTAGATGATGATTTAATGCAATGAAACGGCTTGTGTAACAA 1657449
Qy 607 GTTAAAAAGGTAATTTGCTTGGGTGATGATGAACATCTAGTAAATTTGAAGCAGAT 666
Db 1657448 GTGAAAAAGCAGATTTTGGCTTAGGAGACGATGTTGAATCTAGCGAAATTTATCGTTAGAC 1657389
Qy 667 GTTCCAAATTTATTAATGATGATTTAAAGATTCGGATGACATTTATGCTCAAAATATTCAA 726
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Qy 727 ATTACGGATAAAGGTACTGCTTTTGATGTTGATGATGATGATGATGATGATGATGATGATGAT 786
Db 1657328 AAAGAACTACTGGAATTAATTCGACGCTATCATCGCGACGAGTTTGTAGCTTCATTT 1657269
Qy 787 CTGCTCCCAATATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 846
Db 1657268 GAAATTCCTGCTTACGGAGATCAATATGTTTAAATGCTTAAAGTGTATTCGCGCTTGT 1657209
Qy 847 TATTTAGAGAAGCTTAGATGTTACAAATATTAAGAAGACATTAGAAAAGTTTGTGTTGT 906
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Qy 967 CATCCAGAGAAATTAAGTCTCAATTTGACACGACGAAAGAAATATCCACATTAAGAA 1026
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Qy 1027 GTTGTGTCAGTATTTCAACACACACACTTCTCTAGAACACAAAGCAATTTTAAATGAATTT 1086
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Qy 1087 GCAGAAATTTATGTAAGCAGATCGTGATTTCTTATGTAATTTTGGCTCAATAGA 1146
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## RESULT 15

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US-10-398-221-8
; Sequence 8, Application US/10398221
; Publication No. US20040018514A1
; GENERAL INFORMATION:
; APPLICANT: KUNST, Frederik
; APPLICANT: GLASER, Philippe
; TITLE OF INVENTION: Listeria innocua, genome and applications
; FILE REFERENCE: 344 702 - US
; CURRENT APPLICATION NUMBER: US/10398, 221
; CURRENT FILING DATE: 2003-03-27
; PRIOR APPLICATION NUMBER: PCT/FR 01/03 061
; PRIOR FILING DATE: 2001-10-04
; PRIOR APPLICATION NUMBER: FR 00/12 697
; PRIOR FILING DATE: 2000-10-04
; NUMBER OF SEQ ID NOS: 4025
; SOFTWARE: PatentIn version 3.0
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; SEQ ID NO 8
; LENGTH: 495269
; TYPE: DNA
; ORGANISM: Listeria innocua
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (1)..(end)
; OTHER INFORMATION: n can be any nucleotide: a, g, c or t/u
US-10-398-221-8
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Query Match 38.8%; Score 524; DB 16; Length 495269;

Best Local Similarity 62.4%; Pred. No. 9e-84; Mismatches 505; Indels 1; Matches 838; Conservative 0;

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Qy 67 TCATTAGCAAAATCATGATGATTTAGGACATGAAGTTCAAGGATCAAGGATCGGATTTGGAAC 126
Db 100968 GCACCTTGCTCAGATCCTCGACGATAAAGGTTTTCAGTGCAAGCAGCATGTAGACAAA 101027
Qy 127 TACGTATTTACAGAAAGTTGCTCTTAGAATAAGGGGATAAAATATTACCATTTGGTGCT 186
Db 101028 TATTTTTCACGACAGAAAGCATTTGGAAGAAAACAAATTCATTTTGA-CGTTTCAGCG 101086
Qy 187 AATAACATAAAGAGATATGTTAGTTTATCAAGSTAAATGCAATTCGCGAGTAGCCATGAA 246
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Db 101147 GAAATGAGGCTGCTAATGAGCTTAATCTTCCGCTGATTCGATATCAATAATTTTATAGT 101206
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Qy 367 ACAGGTTTATTTATCACATGTTATGAATGGTTCATATAAAGAGCTTCATTTTAAATTTGGTAT 426
Db 101267 ACTGGTCTTCTTCTCATGTTGGTGGCCATTCGTCCTCATATTTGATTTGGTGAT 101326
Qy 427 GGCACAGGATAGGATTCGCTGAAAGTGATTTATTCGCTTTTGAAGCATGTAATATAGA 486
Db 101327 GGAACGCTAGTGACACAAAGATGCTAAATATTTGCTGTAGAAAGCTTTGAGTATCAA 101386
Qy 487 CGTCACCTTTTAAAGTTATAAACCCTGATTACGCAATTAATGACAAATATTGATTTTCGATCAT 546
Db 101387 CGCCATTTCTCTGGTACAAACCAACTTTCGATTAATGACCAATTTGACTGGGATCAC 101446
Qy 547 CTTGATTTTCAAGATATTTAATGATGTTTGTGATGATGATGATGATGATGATGATGATGATGAT 606
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Db 101507 GTGAAAAAGGCGATTTTGTCTTAGGAGACGATGTTGAACCTACCGCAATTTTCGTTAGC 101566
Qy 667 GTTCCAAATTTATTAATGATTTAAAGATTCGGATGACATTTATGCTCAAAATATTCAA 726
Db 101567 GTTCCGATTTATTTACTTTGGCTTTGGTTTGGTTTCAAGAAACGAAATTTCAAGCTAAATGTTAA 101626
Qy 727 ATTACGGATAAAGGTACTGCTTTTGTGATGATGATGATGATGATGATGATGATGATGATGATGAT 786
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Qy 787 CTGCTCCCAATATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 846
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Qy 847 TATTTAGAGAAGCTTAGATGTTTACAATATTAAGAAGCAATTTAGAAACGCTTTTGGTGCTGT 906
Db 101747 GACTATGAGGATTTACAGTAGACGAGTGAAGAAAGAAATTTAAACCTTTTGAAGGCGTA 101806
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Qy	907	AAAGCTGCTTCAATGAACACACATTCACATCAAGTTATTGTAGATGATTATGCACAC	966
Db	101807	AAAAGAAGATTAGCATTTACGAAAAAGGAATCAAGTTTGTAGATGACTATGCGCAC	101866
Qy	967	CATCAAGAGAAATAGTGTACAAATTGACACAGCAGCAAGAAATATCCACATAAGAA	1026
Db	101867	CATCCTTCAGAAATCGTGGCGCTGTTAAATGCTGTAGACAAAAATATCCAAATAAAAA	101926
Qy	1027	GTCTTGAGTATTTCAACACACACATTTCTCTAGACACAGCATTTTAAATGAATTT	1086
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Qy	1087	GCAGAACTTTATGTAAAGCAGATCGTATTCTTATGTGAAATTTTGGCTCAATTAGA	1146
Db	101987	CGGATAGCTTGAATTTAGCGSHGAGATATCTTTGTGACATTTTGGTTCTGCGGT	102046
Qy	1147	GAAATTCGTGGCATTAAACGATACAGATTTAAATGTATAAAATTTGGAGGTGCATCGTC	1206
Db	102047	GAAAAACGGTAAATTTAACTATTGCTGATTTAGCGCATAAAAACCAAGGAAATCATATT	102106
Qy	1207	ATTAATGAAGATCTTATTTAAATGTATTAGACAAATTTGATGCTGTTGTTTATTATG	1266
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Db	102227	GTGCTAATGAGTTCTAAAGAA	102250

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Job time : 636 secs

GenCore version 5.1.6  
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OM protein - protein search, using sw model

Run on: June 25, 2004, 08:51:36 ; Search time 23 Seconds  
(without alignments)  
980.893 Million cell updates/sec

Title: US-09-103-287-2  
Perfect score: 2283  
Sequence: 1 MTHYFVGIKSGMSLSAQI.....GDIQLQNAVLDKLGKNAF 437

Scoring table: BLOSUM62  
Gapop 10.0 , Gapext 0.5

Searched: 389414 seqs, 51625971 residues

Total number of hits satisfying chosen parameters: 389414

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

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  - 2: /cgn2\_6/ptodata/2/iaa/5B.COMB.pdp.\*
  - 3: /cgn2\_6/ptodata/2/iaa/6A.COMB.pdp.\*
  - 4: /cgn2\_6/ptodata/2/iaa/6B.COMB.pdp.\*
  - 5: /cgn2\_6/ptodata/2/iaa/ECTUS.COMB.pdp.\*
  - 6: /cgn2\_6/ptodata/2/iaa/backfiles.pdp.\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	1953	85.5	442	4	US-09-134-001C-5133
2	1107	48.5	444	4	US-08-940-572-2
3	1031	45.2	422	3	US-08-961-083-116
4	1031	45.2	422	4	US-09-536-784-116
5	966	42.3	291	4	US-09-107-532A-6914
6	557	24.4	492	4	US-09-328-352-5023
7	518	22.7	493	4	US-09-540-236-2712
8	492	21.6	492	4	US-09-489-039A-12280
9	481	21.1	513	4	US-09-252-991A-24196
10	469	20.5	488	4	US-09-543-681A-6951
11	464	20.3	812	4	US-09-198-452A-978
12	412	18.0	475	4	US-09-328-352-4942
13	388.5	17.0	473	4	US-09-540-236-2891
14	358.5	15.7	471	4	US-09-543-681A-5705
15	348.5	15.3	458	4	US-09-489-039A-8987
16	263	11.5	494	3	US-08-984-618-3
17	225.3	9.9	97	4	US-08-940-572-4
18	197	8.6	457	4	US-09-134-001C-3838
19	196	8.6	283	4	US-09-252-991A-21952
20	191	8.4	449	4	US-09-530-836-2
21	190	8.3	46	4	US-08-165A-446
22	187.5	8.2	450	1	US-08-665-435A-2
23	187.5	8.2	450	2	US-08-843-309-2
24	183.5	8.0	446	2	US-08-934-481-2
25	183.5	8.0	446	4	US-09-290-602-2
26	180	7.9	413	3	US-09-147-928-2
27	179.5	7.9	457	4	US-09-134-001C-4284

28	178	7.8	455	4	US-09-107-532A-5228	Sequence 5228, Ap
29	172.5	7.6	452	3	US-09-144-918-2	Sequence 2, Appli
30	165.5	7.2	452	4	US-09-530-836-6	Sequence 6, Appli
31	160	7.0	335	3	US-08-961-083-110	Sequence 110, App
32	160	7.0	335	4	US-09-536-784-110	Sequence 110, App
33	158	6.9	419	4	US-09-198-452A-974	Sequence 974, App
34	156.5	6.9	483	4	US-09-198-452A-438	Sequence 438, App
35	156	6.8	437	4	US-09-530-836-4	Sequence 4, Appli
36	152.5	6.7	451	4	US-09-530-836-5	Sequence 5, Appli
37	149.5	6.5	523	4	US-09-540-236-3139	Sequence 3139, Ap
38	144.5	6.3	478	4	US-09-489-039A-12376	Sequence 12376, A
39	144	6.3	488	3	US-08-984-618-4	Sequence 4, Appli
40	139	6.1	489	4	US-09-540-236-2593	Sequence 2593, Ap
41	137	6.0	483	4	US-09-328-352-6020	Sequence 6020, Ap
42	134.5	5.9	465	4	US-09-107-532A-7268	Sequence 7268, Ap
43	134	5.9	494	3	US-08-988-251-2	Sequence 2, Appli
44	134	5.9	494	3	US-09-386-048-2	Sequence 2, Appli
45	133.5	5.8	484	4	US-09-107-532A-4010	Sequence 4010, Ap

ALIGNMENTS

RESULT 1  
US-09-134-001C-5133  
; Sequence 5133, Application: US/09134001C  
; Patent No. 6380370  
; GENERAL INFORMATION:  
; APPLICANT: Lynn Doucette-Stamm et al  
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO STAPHYLOCOCCUS  
; FILE OF INVENTION: EPIDERMIDIS FOR DIAGNOSTICS AND THERAPEUTICS  
; FILE REFERENCE: GTC-007  
; CURRENT APPLICATION NUMBER: US/09/134,001C  
; CURRENT FILING DATE: 1998-08-13  
; PRIOR APPLICATION NUMBER: US 60/064,964  
; PRIOR FILING DATE: 1997-11-08  
; PRIOR APPLICATION NUMBER: US 60/055,779  
; PRIOR FILING DATE: 1997-08-14  
; NUMBER OF SEQ ID NOS: 5674  
; SEQ ID NO 5133  
; LENGTH: 442  
; TYPE: PRT  
; ORGANISM: Staphylococcus epidermidis  
US-09-134-001C-5133

Query Match	85.5%	Score	1953	DB	4	Length	442
Best Local Similarity	83.1%	Pred. No.	4.1e-186				
Matches	363	Conservative	45	Mismatches	29	Indels	0
QY	1	MTHYFVGIKSGMSLSAQIMHDLGHEVGSQDIENVTEVALRNKGIKILPFGANNIK	60				
DB	6	MTHYFVGIKSGMSLSAQIMHDLGHEVGSQDIENVTEVALRNKGIKILPFGANNITK	65				
QY	61	DMVVGNNAFASHEBEIVRAHOLKLDVSVNDPLGQIIDQYTSVAVTGAGHKSTTGLLS	120				
DB	66	EMVVGNNAFAPDHEBEIVRAHOLKLDIYHDFLGHVINGQYTSVAVTGAGHKSTTGLLS	125				
QY	121	HYVNGDKTSFLIGDGTGMLPESDYFAFEACERYRHFYSKPDYAIMTVIDDHPDYFK	180				
DB	126	HYVNGDKTSFLIGDGTGMLPESDYFAFEACERYRHFYSKPDYAIMTVIDDHPDYFK	185				
QY	181	DINDVDFAPQEMAHNVKGGIANGDDEHLKIEADVPYIYVYGGKSDDIYAQNTQITDKG	240				
DB	186	NIDVDYDAFQHMALNVKGGIANGDDEHLKIEADVPYIYVYGGKSDDIYAQNTQITDKG	245				
QY	241	TAFDVVDGFEYDHFHSPOYGDHTVNLAVIAISVLEKLDVTNKEALETFGGVKRRFN	300				
DB	246	TQFDVVIKGEFYDQFLSPQYGNENILNALVIALISLVNNVENIKALITFGVKRRFN	305				
QY	301	ETITANQVIVDDYAHHPREISATIDTARKKYPHKEVVAVFQPHFTFSQTAFINEFASL	360				
DB	306	ETKVSQVIVDDYAHHPREISATIDTARKKYPHKEVVAVFQPHFTFSQTAFINEFASL	365				

QY 361 KADRVFLCEIPESTRENSGALTIQDLIDKIGASFINEDLINVLEQDFNAVVLFWGAGDI 420  
DB 366 KADQVFLCEIPESTRENGDTIEDLINRIDGSTLIDENSIDVLEKFDNAVILFWGAGDI 425  
QY 421 QKLNAYLDKLGKMAF 437  
DB 426 QKLNAYFEKLGKMAF 442

RESULT 2  
US-08-940-572-2  
; Sequence 2, Application US/08940572  
; Patent No. 6310193  
; GENERAL INFORMATION:  
; APPLICANT: Wallis, Nicola G.  
; APPLICANT: Black, Michael T.  
; APPLICANT: Hodgson, John E.  
; APPLICANT: Knowles, David J.  
; APPLICANT: Lonetto, Michael A.  
; APPLICANT: Nicholas, Richard O.  
; APPLICANT: Stodola, Robert K.  
; TITLE OF INVENTION: No. 6310193el MurC  
; NUMBER OF SEQUENCES: 6  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Dechert, Price & Rhoads  
; STREET: 4000 Bell Atlantic Tower, 1717 Arch Stre  
; CITY: Philadelphia  
; STATE: PA  
; COUNTRY: USA  
; ZIP: 19103-2793  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Diskette  
; COMPUTER: IBM Compatible  
; OPERATING SYSTEM: DOS  
; SOFTWARE: FastSeq for Windows Version 2.0  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/940,572  
; FILING DATE:  
; CLASSIFICATION: 536  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 60/024022  
; FILING DATE: 16-AUG-1996  
; APPLICATION NUMBER: US 08/889711  
; FILING DATE: 08-JUL-1997  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Dickinson, Q. Todd  
; REGISTRATION NUMBER: 28,354  
; REFERENCE/DOCKET NUMBER: P50533-04  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: 215/994-2252  
; TELEFAX: 215/994-2222  
; TELEX:  
; INFORMATION FOR SEQ ID NO: 2:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 444 amino acids  
; TYPE: amino acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
US-08-940-572-2

Query Match 48.5%; Score 1107; DB 4; Length 444;  
Best Local Similarity 49.8%; Pred. No. 9.4e-102;  
Matches 213; Conservative 79; Mismatches 132; Indels 4; Gaps 4;

QY 4 YHFVGIKSGMSLAQIMIDLGHEVQSGDIENYVTFEVALRNKGKILPFGANNIKEDMV 63  
DB 5 YHFVGIKSGMSALMLQMGKVGQSDVEKYFTQRGLEQAGITILPFDKXNLGDME 64  
QY 64 VTQGNAF-ASSHEEIVRAHQLKLDVVSYNDELQIIDQYTSVAVTGAHGTSTTGLLSHW 122  
DB 65 ILAGNAFRPNNVETAYADQNGISYKRYHEFLGSGFRDFVSMGVAGAHGTSTTGLLSHW 124  
QY 123 MNGDKKTSFLIGDGTGMLPESDYFAFEACEVRRHFLSYKPDYAIMTNIDFDPDYFKDI 182

DB 125 LSHITDTSFLIGDGTGRCGSANAKYVPFESDEVERHFMFVHPYSIITNIDFDPDYFTSL 184  
QY 183 NDVFDAPQEMAHNVKGIHAWGDDHLKRIEADVPYIYGGFK-DSDDIYAQNIQITDKCT 241  
DB 185 EDVFNAPNDYAKIITKGLFVYGEDAELRKITSADAPIYIYGFEBAGNDFVASDILSRSTGS 244  
QY 242 AFDVVVDGEFYDHPUSPOYGDHTVLNALAVIAISYLEKLDVTNIKEALETFGGVKRRFNE 301  
DB 245 TETVHFRGNLQGFHPTFGRHNINWATAVIGLLTAGFDLNLVREHLKTFAGVKERFTE 304  
QY 302 TTIANQVIVDDYAHHPREISATIDTARKYPHKVVAVPQPTFTSRTQAFINEFBSLCK 361  
DB 305 KIVNDTVIIDDFAHPTTEIATLDAARQKYPKSVAVPQPTFTFTTIALDDFAHALNQ 364  
QY 362 ADRVFLCEIFGSIRE-NSGALTIQDLIDKIGA-SFINEDLINVLEQDFNAVVLFWGAGD 419  
DB 365 ADVVLAQIYGSAREVDHGVKVEDLANKINKKHQVITVENVSPLLDHEDNAVTVFWGAGD 424  
QY 420 IQKLNAY 427  
DB 425 IQTYEYSP 432

RESULT 3  
US-08-961-083-116  
; Sequence 116, Application US/08961083  
; Patent No. 6159469  
; GENERAL INFORMATION:  
; APPLICANT: Choi et. al.  
; TITLE OF INVENTION: Streptococcus pneumoniae Antigens and Vaccines  
; NUMBER OF SEQUENCES: 452  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Human Genome Sciences, Inc.  
; STREET: 9410 Key West Avenue  
; CITY: Rockville  
; STATE: Maryland  
; COUNTRY: USA  
; ZIP: 20850  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Diskette, 3.50 inch, 1.4Mb storage  
; COMPUTER: HP Vectra 486/33  
; OPERATING SYSTEM: MSDOS version 6.2  
; SOFTWARE: ASCII Text  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/961,083  
; FILING DATE:  
; CLASSIFICATION: 435  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER:  
; FILING DATE:  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Brookes, A. Anders  
; REGISTRATION NUMBER: 36,373  
; REFERENCE/DOCKET NUMBER: PB34022  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (301) 309-8504  
; TELEFAX: (301) 309-8512  
; INFORMATION FOR SEQ ID NO: 116:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 422 amino acids  
; TYPE: amino acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
; MOLECULE TYPE: protein  
US-08-961-083-116

Query Match 45.2%; Score 1031; DB 3; Length 422;  
Best Local Similarity 48.8%; Pred. No. 3.3e-94;  
Matches 200; Conservative 75; Mismatches 131; Indels 4; Gaps 4;

QY 22 HDLGHVEQSGDIENYVTFEVALRNKGKILPFGANNIKEDMVVQGNAF-ASSHEEIVRA 80



HYPOTHETICAL: YES  
ORIGINAL SOURCE: Enterococcus faecium  
FEATURE:  
NAME/KEY: misc feature  
LOCATION: (B) LOCATION 1...291  
SEQUENCE DESCRIPTION: SEQ ID NO: 6914:  
US-09-107-532A-6914

Query Match 42.3%; Score 966; DB 4; Length 291;  
Best Local Similarity 63.8%; Pred. No. 5.5e-88;  
Matches 178; Conservative 42; Mismatches 59; Indels 0; Gaps 0;

QY 4 YHFGVIGKSGMSLAQIMHDLGHEVQSGDIENYVTFEVALRNGKIKILPFGANNIKEDMV 63  
DB 13 YHFGVIGKSGMSLAQIMHDLGHEVQSGDIENYVTFEVALRNGKIKILPFGANNIKEDMV 72

QY 64 VIQGNAPASSHEEIVRAHQKLDVSYNDPLGQIIDQYTSVAVTGAHGKTSITGLLSHYM 123  
DB 73 IAGNAFPDSHEEIQRAKELGLEVIRYHDFIGHEICNYTSIAVTGSHGKTSITGLLSHYL 132

QY 124 NGDKTSFLIGDGTGMLPESDYFAFEACEYRRHFLSYKPDYAIMNIDFHDHDPYKDN 193  
DB 133 SGVRPTSYLIGDGTGMLPESDYFAFEACEYRRHFLSYKPDYAIMNIDFHDHDPYKDN 192

QY 184 DYFDAPCEMAHNVKGIHAWGDDHRLKTEADVPYIYVYFGKSDDIYAQMIQITDKGTAF 243  
DB 193 DYTAFQWAGQVKKALFAYGDDAYRLKLANVPYIYVYFGKSDDIYAQMIQITDKGTAF 252

QY 244 DYYVDGEFYDHLSPQYGDHVTNVALAVIAISYLEKLDV 282  
DB 253 DVTGDEFGVHTVPAFGKHDLNALGVIAVAVVEKLDL 291

RESULT 6  
US-09-328-352-5023  
; Sequence 5023, Application US/09328352  
; Patent No. 6562958  
; GENERAL INFORMATION:  
; APPLICANT: Gary L. Breton et al.  
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO ACINETOBACTER  
; FILE REFERENCE: GTC99-03PA  
; CURRENT APPLICATION NUMBER: US/09/328,352  
; CURRENT FILING DATE: 1999-06-04  
; NUMBER OF SEQ ID NOS: 8252  
; SEQ ID NO 5023  
; LENGTH: 492  
; TYPE: PRT  
; ORGANISM: Acinetobacter baumannii  
US-09-328-352-5023

Query Match 24.4%; Score 557; DB 4; Length 492;  
Best Local Similarity 33.1%; Pred. No. 7.7e-47;  
Matches 150; Conservative 83; Mismatches 176; Indels 44; Gaps 13;

QY 3 YHFGVIGKSGMSLAQIMHDLGHEVQSGDIENYVTFEVALRNGKIKI-LPFGANNIKED 61  
DB 34 HLFVIGGAGMGCGIAEVLNAGQVYVVTGSDIKANAMTE-RLENLGVTVHVGHDASNIKMAV 92

QY 62 MVVIQGNAPASSHEEIVRAHQKLDVSYNDPLGQIIDQYTSVAVTGAHGKTSITGLLSH 121  
DB 93 NVLVVSTAPDENPEVKAATEQRIPIVRAEMGLMRYRHGIAVAGTHGKTTTSLTT 152

QY 122 VMGDK-KTSFLIG-----DGTGMLPESDYFAFEACEYRRHFLSYKPDYAIMNIDFHD 175  
DB 153 MIAEENLDPTYVIGLLNSTGVNAALGESRFVAEADSDASFLYLQPMAAIVTNIDADH 212

QY 176 PD-YFKDINDVDFAPCEMAHNVK-KGI-IAWGDDHRLKTEADV--PIIYVYFGKSDDIY 230  
DB 213 MDYEGSFDKLTQTFVQFLHNLPEYGLAVVGGDDANREILPRVGRPVITYGNEENDIR 272

QY 231 AQNIQTDKGTAFVYVVDGFEYDHLSPQYGDHVTNVALAVIAISYLEKLDVTVNIKEALE 290

DB 273 AIDVEQDGMRSHTFVLKRGREPLRTINQPLHNVLNALAAIGVATDEGVSDAISRALK 332  
QY 291 TFGGVKRRFN-----ETTIANQVIVDDYAHHPREISATIDTARKKYPKHEVAVFOBHTF 345  
DB 333 GFSGVGRFRFQVQGEFELGEGNVKLVDDYGHHPKVEATIKAAQSHPDRLRELVMLFQPHRY 392  
QY 346 SRTQAFNEFAESLCKADRVFLCEIF-----GSIRENSGALTQDLIDK 389  
DB 393 SRTDCDFDFIEVLQVQDQLLLLEVYPAGEKPIVGADSRFLARSIRLARGOVEPI--LIDP 450  
QY 390 IGGASFINEDLINLVEQF--DNAVLPMGAGDI 420  
DB 451 VEG-----NLQIMQNVLPQNDLLLTQAGNV 477

RESULT 7  
US-09-540-236-2712  
; Sequence 2712, Application US/09540236  
; Patent No. 6673910  
; GENERAL INFORMATION:  
; APPLICANT: Gary L. Breton et al.  
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO MORAXELLA CAT  
; FILE REFERENCE: FOR DIAGNOSTICS AND THERAPEUTICS  
; FILE REFERENCE: 2709.2005-001  
; CURRENT APPLICATION NUMBER: US/09/540,236  
; CURRENT FILING DATE: 2000-04-04  
; NUMBER OF SEQ ID NOS: 3840  
; SEQ ID NO 2712  
; LENGTH: 493  
; TYPE: PRT  
; ORGANISM: M.cattarrhalis  
US-09-540-236-2712

Query Match 22.7%; Score 518; DB 4; Length 493;  
Best Local Similarity 31.8%; Pred. No. 6e-43;  
Matches 144; Conservative 78; Mismatches 187; Indels 46; Gaps 13;

QY 5 HFVIGKSGMSLAQIMHDLGHEVQSGDIENYVTFEVALRNGKIKI-LPFGANNIKEDMV 63  
DB 34 HLFVIGGAGMGCGIAEVLNAGQVYVVTGSDIKANAMTE-RLENLGVTVHVGHDASNIKMAV 92

QY 64 VIQGNAPASSHEEIVRAHQKLDVSYNDPLGQIIDQYTSVAVTGAHGKTSITGLLSHYM 123  
DB 93 VVSSAIDRONPEIRAALKAHIPVVRADMLGELMRYRHGIAVAGAHGKTTTSLTMM 152

QY 124 -NGDKTSFLIG-----DGTGMLPESDYFAFEACEYRRHFLSYKPDYAIMNIDFHD 177  
DB 153 TEAGLDPTYVIGKLNAGKNAALGASRYLVARDESADSFSLRPMACVVTNIDEDHME 212

QY 178 -YFKDINDVDFAPCEMAHNVK-KGI-IAWGDDHRLKTEADV--PIIYVYFGKSDDIY 232  
DB 213 TYEGSFDKLAQVYVQFLHNPFFYGLAVLCGDDKELYAMIDDIAARPVITYGLEKENDV--- 269

QY 233 NIQITDKGTAFVYVVDGFEYDHLSPQY-----GDHVTNVALAVIAISYLEKL 280  
DB 270 -----QAVDVIA DGT-KTHFTVLAKDKKPLPITINIFGIHNVYALGALTWATDEGV 320

QY 281 DVTNIKEALTEFGVKKERENET-----TIANOVIVDDYAHHPREISATIDTARKKYPH 333  
DB 321 SDKAIQAVKSKPAGVGRFENNSSYPLTDCSGDVLIDDYGHHTTEAMTIKAAQSQYPD 380

QY 334 KEVAVFQPHFTSRTQAFNEFAESLCKADRVFLCEIFGSIRENSGALTQDLIDKTKTGA 393  
DB 381 RLVMFMFQPHRYSTRDCFSFVNVLVSQDKLJLLDVYSAGEELIKGATSNLARSIR 440

QY 394 SFNEDLINV--LEQFDNAVVLPMGAGDIQKQNA 426  
DB 441 GOVEPIVLNVNDKEQITQVLKLTINANDLLMTQGA 475

RESULT 8  
US-09-489-039A-1228C



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; Sequence 12280, Application US/09489039A
; Patent No. 6613836
; GENERAL INFORMATION:
; APPLICANT: Gary Berton et al.
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO KLEBSIELLA
; TITLE OF INVENTION: PNEUMONIAE FOR DIAGNOSTICS AND THERAPEUTICS
; FILE REFERENCE: 2709.2004001
; CURRENT APPLICATION NUMBER: US/09/489,039A
; CURRENT FILING DATE: 2000-01-27
; PRIOR APPLICATION NUMBER: US 60/117,747
; PRIOR FILING DATE: 1999-01-29
; NUMBER OF SEQ ID NOS: 14342
; SEQ ID NO 12280
; LENGTH: 492
; TYPE: PRT
; ORGANISM: Klebsiella pneumoniae
US-09-489-039A-12280

Query Match      21.6%; Score 492; DB 4; Length 492;
Best Local Similarity 29.6%; Pred. No. 2.3e-40;
Matches 138; Conservative 86; Mismatches 182; Indels 60; Gaps 13;

QY      3  HVHFGVIGKSGMSLAQIMHDLGHEVOGSDIENYVTFEVALRNKGKILPFGA----- 55
DB      22  HHFVIGGAGMGGAIEVLNAGYVQISGSDLPNPTVQ-----QLSQLGATYFENHR 73

QY      56  -NNIKEDMVVQGNAPASSHEEIVRAHQKLDVSYNDELQIIDDQYTSVAVTGAHGKTS 114
DB      74  PENIRDAVVVVSSAISADNPETVAEAEIPVIRRAEMLAELMRPHGIAIAGTHGKT- 133

QY      115  TTGGLSHV-----MNGDKTSFLIGDGTGMGLPESDYFAFAACEYRRHFLSKPD 164
DB      134  TTAMVSYIAEAGLDPTFVNG-----GLVKAAGVIAELGHSYLLIAEDSDASFLHQP 189

QY      165  YAIMNTICDFHPD--YFKDINDVDFAFQEMAHNVK--KGIIANGDDEHLKTEADV--PIY 219
DB      190  VAIVTNEADHMDTYGDFENKLTQTFINFLNLPFYGRAVNCVDDPVIRELLPRVGRQT 249

QY      220  YGFKSDSDIYAQNI-QITDKGTAFDVVDGEFFDHFSLSPQYGDHTVLNALAVIAISYLE 278
DB      250  TYGFSDDADVRVEDYRQVGAQHFELVRQDKAILQVTLNAP--GRHINALAAAVATEE 308

QY      279  KLVNTNKEALETFGGVKRRN-----ETTIA-----NQIVDDYAHHPREISATIDTAR 328
DB      309  GIDDRALIRALESGQGRDFDGLGEPPLAEVNGKPSAMLIDYGHPTVEVDATIKAR 368

QY      329  KYPHKEVAVFQPHFTSRTOAFNLEFASLCKADRVFLCEIFGSIRESNGALTIQDLID 388
DB      369  AGWEDKNLVVQFPHRYTRTRDLVDYDFANVLTQVDALLMLDVPYAGEAPIPGADSRSLCR 428

QY      389  KIGASFIN-----EDLNVLEQFQNAVLFMAGDIQKL 423
DB      429  TIRGRGVDPILVPSDAQAEMLASVLT--GNDLVLVQAGNIGKI 472

RESULT 9
US-09-252-991A-24196
; Sequence 24196, Application US/09252991A
; Patent No. 6551795
; GENERAL INFORMATION:
; APPLICANT: Marc J. Rubenfield et al.
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS
; TITLE OF INVENTION: AERUGINOSA FOR DIAGNOSTICS AND THERAPEUTICS
; FILE REFERENCE: 107196.136
; CURRENT APPLICATION NUMBER: US/09/252,991A
; CURRENT FILING DATE: 1999-02-18
; PRIOR APPLICATION NUMBER: US 60/074,788
; PRIOR FILING DATE: 1998-02-18
; PRIOR APPLICATION NUMBER: US 60/094,190
; PRIOR FILING DATE: 1998-07-27
; NUMBER OF SEQ ID NOS: 33142
; SEQ ID NO 24196
; LENGTH: 513

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; TYPE: PRT
; ORGANISM: Pseudomonas aeruginosa
US-09-252-991A-24196

Query Match      21.1%; Score 481; DB 4; Length 513;
Best Local Similarity 30.9%; Pred. No. 3.1e-39;
Matches 146; Conservative 80; Mismatches 195; Indels 52; Gaps 14;

QY      5  HFVIGXGSGMSLAQIMHDLGHEVOGSDIENYVTFEVALRNKGKILPFGANNIKEDMV 63
DB      52  HFVIGGAGMGGAIEVLNAGYVSGSDLKASAVTE-RLEKFGAQIFIGHQAEADGADV 110

QY      64  VIQGNAPASSHEEIVRAHQKLDVSYNDELQIIDDQYTSVAVTGAHGKISTTGLSHVM 123
DB      111  LVVSSAINRANPEVASALERIRIPVWPEAEMLAEMLRYRHGIAVAGTHGKTITSLIASVF 170

QY      124  -NGDKTSFLIGD-----GTGMLPESDYFAFAACEYRRHFLSKPDVAINTNIDFQI-P 176
DB      171  AAGGLDPTFVIGGRKLNAGTNAQLGASRYLVAEADSDASELHLOPMVAVVTNIDAEWA 230

QY      177  DYPKDIINDVDFAFQEMAHNVK-KGI-IANGDDEHLKTEADV--PIYVYGKSDSDIY 232
DB      231  TYGDFPNKLTQTFEFLNLPFYGLAVNCVDDPVVREILPQIARPTVTYGLSEADAVRAI 290

QY      233  NIQTIDKGTAPDVVDGEFFDHFSLSPQY-----GDHTVLNALAVIAISYLEKLDV 282
DB      291  NIROGMRVTWFTV-----LRPEREPLDVSNMPLGNLNLNLSLTIATDEGLSD 340

QY      283  TNIKEALETFGGVKRRN-----ETTIANOVIVDDYAHHPREISATIDTARKKYPHKEV 337
DB      341  EATVQGLSGFGVGRRFQVYGELOVGGSVMLVDDYGHHPREVAIVKAIKRGWPERRLV 400

QY      338  AVFQPHFTSRTOAFNLEFASLCKADRVFLCEIFGSIRESNGALTIQDLKIGASFI- 396
DB      401  MVYQPHRYTRTRDLVDYDFVQVLEAGANVLLMEVTPAGEEPIPGADSRQLCHSIRQ 460

QY      397  -----NEDLVLEQFQNAVLFMAGDI-----QKLVNAYLDKLGKNA 436
DB      461  PIYFERDAFLAPLVKPLLRAGDILLCCQAGSVGGVGLAPQLIKNPLFAGKGGKA 513

RESULT 10
US-09-543-681A-6951
; Sequence 6951, Application US/09543681A
; Patent No. 6605709
; GENERAL INFORMATION:
; APPLICANT: GARY BERTON
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PROTEUS MIRABI
; TITLE OF INVENTION: DIAGNOSTICS AND THERAPEUTICS
; FILE REFERENCE: 2709.1002-001
; CURRENT APPLICATION NUMBER: US/09/543,681A
; CURRENT FILING DATE: 2000-04-05
; PRIOR APPLICATION NUMBER: US 60/128,706
; PRIOR FILING DATE: 1999-04-09
; NUMBER OF SEQ ID NOS: 8344
; SEQ ID NO 6951
; LENGTH: 488
; TYPE: PRT
; ORGANISM: Proteus mirabilis
US-09-543-681A-6951

Query Match      20.5%; Score 469; DB 4; Length 488;
Best Local Similarity 28.3%; Pred. No. 4.5e-38;
Matches 136; Conservative 84; Mismatches 171; Indels 90; Gaps 15;

QY      3  HVHFGVIGKSGMSLAQIMHDLGHEVOGSDIENYVTFEVALRNKGKILPFGA----- 55
DB      22  HHFVIGGAGMGGAIEVLNAGYVQISGSDLPNPTVQ-----QLVAGATYFENHR 73

QY      56  -NNIKEDMVVQGNAPASSHEEIVRAHQKLDVSYNDELQIIDDQYTSVAVTGAHGKTS 114
DB      74  PENIRDAVVVVSSAISADNPETVAEAEIPVIRRAEMLAELMRPHGIAIAGTHGKT 133

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QY	115	TTGLLSHV-----MNGDKKTSFLIGDGTGNGLPESDYPFAFEACEYRRHFLSVKPD	164
Db	134	TTAMIGNIYAQAAGLDPTFVNG---GLVKSAGTHARLGCGRYLLAEADESDASFHLQPM	189
QY	165	YALMTWIDFPDHPD-YFKDINDVDFADQFQEMAHNVKKIIAWG-----DDEHLRKIEADVP	217
Db	190	VAVVTNEADHMDYHGNFNLKETFITELHNP---FYGRVWCIDDEVIIRSILPKVG	245
QY	218	IYY--YGFKDSDDIYAQNIQITDKGTA-----FDVYVDBGBFYDHFLSPOQGDH	263
Db	246	RYITTGFSEDAADVRIIHYE--QKGAQGFFTISREDMPDIDVW_MAP-----GRH	293
QY	264	TVLNALAVIAISYLEKLDVTNIKAELETFGGVKBRFN-----ETTIANQVIVDDY	313
Db	294	NALNATAAVAVATEGIEADEHILAALNFOQTGRFRDFLGNFSLHVNQSGEVMVLVDDY	353
QY	314	AHHPRETSATIDTAKXYPKHVVAVQPHPTFSTQAFNLNFAELSLCKADRWFLCEIRGS	373
Db	354	GHPHTEVATIIKARAGCHPDKRLNMLQPHRYTRTDLYEDJFATVLANQVDILLITDVYAA	413
QY	374	-----IRENSGALTIOPLDIKI--GGASFNIEDLINVLEQFDNNAVLFPMGAGDTQK	422
Db	414	GEAPIPGADSRSLCRTIQRCKLPDIWVSVDENISSILAGVIT--DNDLVLVQOGAGNIGK	471
QY	423	L	423
		:	
Db	472	I	472

```

RESULT 11
US-09-198-452A-978
; Sequence 978, Application US/09198452A
; Patent No. 6559294
; GENERAL INFORMATION:
; APPLICANT: Grifffais, R.
; TITLE OF INVENTION: Chlamydia pneumoniae genomic sequence and polypeptides, fragments
; TITLS OF INVENTION: thereof and uses thereof, in particular for the diagnosis, prevention
; TITLS OF INVENTION: and treatment of infection
; FILE REFERENCE: 9710-003-999
; CURRENT APPLICATION NUMBER: US/09/198,452A
; CURRENT FILING DATE: 1998-11-24
; NUMBER OF SEQ ID NOS: 6849
; SEQ ID NO 978
; LENGTH: 812
; TYPE: prt
; ORGANISM: Chlamydia pneumoniae
; US-09-198-452A-978

```

Query Match	20.3%; Score 464; DB 4; Length 812;
Best Local Similarity	28.0%; Pred. No.3.2e-37;
Matches	Conservative 91; Mismatches 180; Indels 64; Gaps 16;
Qy	4 YHFGVIGSGMSSLAQIMHDLGHEVQSDI--ENVVFTEVALRNKGILP--FGANNIKED 61
Db	10 YHFTIGGIGMSALAHILLDRGYEVSGLDYEST--TIESLKAGARCFSGHSDSHVPHD 67
Qy	62 MVVIQGNFASSHEEIVRAHQLKLDVYSYNDFLQGIIDQYTSVAVTGAHGKTSTTGLLSH 121
Db	68 AVVVTSGSIADPNVEYLTAIORSSLLERALLSQLMEGYESILVSGHGKTGTSLLRA 127
Qy	122 V--MNGDKKTSFLIGSGTGMGLP-----ESDYFAFEACEYRRHFSLYKPDYAIMTNI 171
Db	128 IFQEAQKDPYAIG-----GLAANCLNGYSGSKIFVAEADSDGSLKHYTPRAVVIITNI 182
Qy	172 DFC--PDYFKDINDVDFAPQEMAHNVKKGIITAGWDDEHLRKI--EADYPI-----YYY 221
Db	183 DNEHLNNAVAGLDNLVQVIQDPFRRKV-----TDLNKFVYNGDCPILKGNVQGISY 232
Qy	222 GFKDSDDIYAQNIQITDKTAFDVYDVGEEFYDHFSPQY-----GDHTVLNALAVIA 273
Db	233 GY--SPECQLHVTYSYNQKAW-----QSHFSTFLGQYQIENLPQGNNAANAAACG 284
Qy	274 ISVLSKLVNTNKEMLETFGGYKRRSFNETTIANQ--VI VDDVAHHPREISATIDTARKKYP 332

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      :: :|::|||:: : :|::|||:: :|::|||:: :|::|||::
285 VALTFGIDINIRKALKFSGVHRRLEKRKNLSBSFLEFDYAHHPVEVAHTLRSVRDAVG 344

      :: :|::|||:: : :|::|||:: :|::|||:: :|::|||::
333 HKEVAVFOGHTRSRQAFINEFAESLCKADRVFLCEIFGSIRENSGALTICDLDIKGG 392

      :: :|::|||:: : :|::|||:: :|::|||:: :|::|||::
345 LREVIATFOPHRPSRUEECIQTPKAFQEADEVILTDVYSAGESPRESIIISDLAEQIRK 404

      :: :|::|||:: : :|::|||:: :|::|||:: :|::|||::
393 ASFI-----NEDLINVLEOF--DNAVVLFMGAGDIQKLNAYILD 429

      :: :|::|||:: : :|::|||:: :|::|||:: :|::|||::
405 SSYHCVCYPHGDIVDYLRNYIRIHDVCSVLGAGNIYTIGEALKD 449

RESULT 12
US-09-328-352-4942           ; Sequence 4942, Application US/09328352
; Patent No. 6562958
; GENERAL INFORMATION:
; APPLICANT: Gary L. Breton et al.
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO ACINETOBACTER
; TITLE OF INVENTION: BAUMANNII FOR DIAGNOSTICS AND THERAPEUTICS
; FILE REFERENCE: GTC99-03PA
; CURRENT APPLICATION NUMBER: US/09/328,352
; CURRENT FILING DATE: 1999-06-04
; NUMBER OF SEQ ID NOS: 8252
; SEQ ID NO 4942
; LENGTH: 475
; TYPE: PRT
; ORGANISM: Acinetobacter baumannii
US-09-328-352-4942

```

Query Match	18.0%	Score	412	DB	4	Length	475
Best Local Similarity	29.0%	Pred. No.	2.1e-32				
Matches	134	Conservative	75	Mismatches	203	Indels	50
Gaps	15						

  

QY	3	HYHVGKSGMSLAQIMHDLGHEVGSGDIENYVFTEVALRNKGIKILP-FGANNIK--	59
DB	20	HLHLIGCTFGMSLALLARDLGHKVTGSDSNVYPPMSTQLENAGIELMQGYDRSHLQPH	79
QY	60	EDMWVIOGNAPASHEBIVRAHQIKLDVVSYNDFLQIIDCYTSV-AVTGAHGKTSITGL	118
DB	80	FDLIVIV-GNAKRGIDAVEYMLNEGLEYISGPQFLADHVLQGRHVLGVAGTHGKTTITTM	138
QY	119	LSHWNV-GDKKTSPLIGDGTGMGLPES-----DYFAPEACEY-----RRHFLSYKPD	164
DB	139	LAWIDQAGLNPGLIG-GVPLGSEARLGGGKYFVVEADYSAPFDKSKFVHYHPK	197
QY	165	YAIMTNIDFPHDPYFKDINVDFAFQEMAHNV--KGIILAWGDDHELRKI---EADVPYI	219
DB	198	TAILNNLEFHDADIFDDLAAIQOFHLHVRTIPSEGRIIIPITETHIDEVLEMGWTPI	257
QY	220	YVGFKSDDDIYAQNIQITDKGTADFVVDGEFYDHFSPQGDRTVLNALAVIAISYLEK	279
DB	258	RTSLEANEKAALSABLISIDGSHEKVLNGNVIGEVKMSWTGQHSVANALATIAAAQHV	317
QY	280	LDVTNIKEALTFCGGVKRRFNETTIANQV-IVDDYAHHPREISATIDTARKYPHKVEVA	338
DB	318	VSLEKACEALSNFGVKRRMBELCTINGIEYDDFAHHTAIDTLDGARKRLGERRUWA	377
QY	339	VFQHTFS-RQAFLNFAEISLCKADRVFLCE-----IPFGSTRENSGALTIQDL	386
DB	378	IIEPRSTNRMGSHKQGLAHARLADDEVITWQPSGLDWDLPQVIEATNHAQVSRSLDEI	437
QY	387	IDKTGGGASFINEDJNLVLEQFDNAVVLPMG--AGDIQKLQNA	426
DB	438	IDRI-----VNEAGEDAVVIVMSNGGFGGLHQKLMGA	469

RESULT 13  
US-09-540-236-2891  
; Sequence 2891, Application US/09540236  
; Patent No. 6673910  
; GENERAL INFORMATION:  
; APPLICANT: Gary L. Breton et al.

; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO MORAXELLA CATAR  
 ; FILE OF INVENTION: FOR DIAGNOSTICS AND THERAPEUTICS  
 ; FILE REFERENCE: 2709.2005-001  
 ; CURRENT APPLICATION NUMBER: US/09/540,236  
 ; CURRENT FILING DATE: 2000-04-04  
 ; NUMBER OF SEQ ID NOS: 3840  
 ; SEQ ID NO 2891  
 ; LENGTH: 473  
 ; TYPE: PRT  
 ; ORGANISM: M. catarrhalis  
 US-09-540-236-2891

Query Match 17.0%; Score 388.5; DB 4; Length 473;  
 Best Local Similarity 27.4%; Pred. No. 4.6e-33; Indels 99; Gaps 21;  
 Matches 135; Conservative 79; Mismatches 179;

QY 3 HVFVGKSGMSSLAQIMHDLGHEVQSGDIENYVFFTEVALRNKGKILP-FGANNNI--K 59  
 DB 15 HHLGICGTFMGSLALLARDLGHVTVGSDANIYPPMSTQLADAGVEWEGYHAEHLIPT 74  
 QY 60 EDMVVIQGNAPASSHEEIVRAHQKLDVSYNDPLGQII--DQVTSVAVTGAGHKSTTGG 117  
 DB 75 EDLIVV-GNACKGMPAIEYMLNERLPYTSQPFLYETVLKDRHV-LAVAGTHGKTITTT 132  
 QY 118 LLSHVMN-GDKTSLFLIGDGTGMLPESD-----YFAFEACEY----- 154  
 DB 133 MLAWILOFGSDGTGFLIG--GVPLVNTDORRLSLAFQHSYLGKQFEVIEADYDSAFP 189  
 QY 155 --RRHFLSYKPDVAMTNIDFHPDYFKINDVDFAFQEMAHNV-KRGIIAWGDDEHLRX 211  
 DB 190 DKSKFVHYPTTALLNNLEYDHADIADLDIAIQTFHMRMIPSKGQII----- 240  
 QY 212 IEADVPIYYGFKDSDIYAQNIQIT-DKG---TAFDVYVDGE-----FYD 253  
 DB 241 IPANTP-----SUETILDKGVTWVTRTSINGDAEWQAKLDANDGSSFW 285  
 QY 254 HFLS-----POYGDHVTNLNLAVALISYLEKLDVNIKEALETFGGVKKRRFNETTIAN 306  
 DB 286 HENNTSAMRWMSGLNENVALTAIAAAHHVGVSVEMACTLSHFGGIKRRMELIGDWD 345  
 QY 307 QVIV-DVYAHHPREISATIDTARKKYPEKEVAVFQPHTF-S-RTOAFINFEABSLCKADR 364  
 DB 346 DILVDFDFAHPTALSTLDCAKRLTPRRIWALIEPSNTKLSGSRPHLAASAAIADQ 405  
 QY 365 YFLCEIFG---SIRENSGALTIQDLIDKIGGASFINEDLINVLEQFDNA--VVLPMGAGD 419  
 DB 406 VIWYEPQGLTWGLKEAIGSTPNQVLDISNA-----IIEHKTYAKAGDAIIIMSKE 458  
 QY 420 IQKLQNAVLDKL 431  
 DB 459 FENTHGRLLDAL 470

RESULT 14  
 US-09-543-681A-5705  
 ; Sequence 5705, Application US/09543681A  
 ; Patent No. 6605709  
 ; GENERAL INFORMATION:  
 ; APPLICANT: GARY BRETON  
 ; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PROTEUS MIRABIL  
 ; FILE OF INVENTION: DIAGNOSTICS AND THERAPEUTICS  
 ; FILE REFERENCE: 2709.1002-001  
 ; CURRENT APPLICATION NUMBER: US/09/543,681A  
 ; CURRENT FILING DATE: 2000-04-05  
 ; PRIOR APPLICATION NUMBER: US 60/128,706  
 ; PRIOR FILING DATE: 1999-04-09  
 ; NUMBER OF SEQ ID NOS: 8344  
 ; SEQ ID NO 5705  
 ; LENGTH: 471  
 ; TYPE: PRT  
 ; ORGANISM: Proteus mirabilis  
 US-09-543-681A-5705

Query Match 15.7%; Score 358.5; DB 4; Length 471;  
 Best Local Similarity 27.1%; Pred. No. 4.4e-27;  
 Matches 128; Conservative 79; Mismatches 198; Indels 67; Gaps 19;  
 QY 3 HVFVGKSGMSSLAQIMHDLGHEVQSGDIENYVFFTEVALRNKGKILP-FGANNNI-- 59  
 DB 14 HHLGICGTFMGSLALLARAKGHKVTGSDANVYPPMSTLLENQIGIDLIQGYDPSQLEPRD 73  
 QY 60 EDMVVIQGNAPASSHEEIVRAHQKLDVSYNDPLGQII--DQVTSVAVTGAGHKSTTGL 118  
 DB 74 PDMVII-GNAMTRGNPCVEAVLEKGLPYTSGPQWLHDYILPERVWLAVAGTHGKTITAGM 132  
 QY 119 LSHVMNG-DKTSFLIGDGTG-----MGLPESDYFAFEACEY-----RRHFLSYKPDY 165  
 DB 133 LAWILEDCGYPGFLIGGVPCNFQVSAQLGESPPFVIEADEYDSAFFDKRSKFVHYSPT 192  
 QY 166 AIMTNDIFDHPDYFKINDVDFAFQEMAH-----NVKK--GIIAWGDDEH 208  
 DB 193 LILNNLEFDHADIPTDLDLA-QKPHHLVRIVPGSGKIMPNDOLMLKOTIGMGCWSEEE- 251  
 QY 209 LRKIEADVPIYYGFKDSDIYAQNIQITDKGTAFDVYVDGEFYDHFSLSPQYGDHVTILNA 268  
 DB 252 -----YTG--ETGDMQAK--KLSDSSHFVAFHKGEQVGEVCMGLSGERNMQNG 296  
 QY 269 L-AVIAISYLEKLDVNIKEALETFGGVKKRRFNETTIANQV-IVDDYAHHPREISATIDT 326  
 DB 297 LMAIVAHHVGVLPV-DACAALNKFINARRELELRGEVNOVSVYDDFAHPTAILATTLEA 355  
 QY 327 ARKKY-PHEKVVAVFQPHTFSTQAF-LNEFABSLCKADRVLCFIFGSIENSALATIQ 384  
 DB 356 LRKVGSGTARTIAVLEPRSTNWKMGISKDDIAPALGRADEVFL-----FQPPNIQWLVS 409  
 QY 385 DLIDKIGGASFINEDLINVLEQFDNAV-----VLPMGAGDIQKLQNAVLDKL 431  
 DB 410 DIAEKVQPARWSTIDITLVEWAKAKPGDHILLMSNGSGFGGIEHKLAKL 461

RESULT 15  
 US-09-489-039A-8987  
 ; Sequence 8987, Application US/09489039A  
 ; Patent No. 6610836  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Gary Breton et. al  
 ; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO KLEBSIELLA  
 ; FILE OF INVENTION: PNEUMONIAE FOR DIAGNOSTICS AND THERAPEUTICS  
 ; FILE REFERENCE: 2709-2004001  
 ; CURRENT APPLICATION NUMBER: US/09/489,039A  
 ; CURRENT FILING DATE: 2000-01-27  
 ; PRIOR APPLICATION NUMBER: US 60/117,747  
 ; PRIOR FILING DATE: 1999-01-29  
 ; NUMBER OF SEQ ID NOS: 14342  
 ; SEQ ID NO 8987  
 ; LENGTH: 458  
 ; TYPE: PRT  
 ; ORGANISM: Klebsiella pneumoniae  
 US-09-489-039A-8987

Query Match 15.3%; Score 348.5; DB 4; Length 458;  
 Best Local Similarity 27.6%; Pred. No. 4.2e-26;  
 Matches 129; Conservative 79; Mismatches 207; Indels 53; Gaps 19;  
 QY 5 HVFVGKSGMSSLAQIMHDLGHEVQSGDIENYVFFTEVALRNKGKILP-FGANNNI--KED 61  
 DB 5 HHLGICGTFMGSLAMLAARSLEGHEVTVGSDANVYPPMSTLLENQIGIDLIQGYDPSQLEPRD 64  
 QY 62 MVVIQGNAPASSHEEIVRAHQKLDVSYNDPLGQII--DQVTSVAVTGAGHKSTTGL 119  
 DB 65 LVII-GNAMTRGNPCVEAVLENNIPYMSGPQWLHDVFLDRWV-LAVAGTHGKTITAGMA 122  
 QY 120 SHVMNG-DKTSFLIGDGTG-----MGLPESDYFAFEACEY-----RRHFLSYKPDYA 166  
 DB 123 TWILRACGYKPGFVIGVPGNFVDVSARIGDSPPFFVIEADEYDCAFDCKRSKFHYICPTL 182



GenCore version 5.1.6  
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OM protein - protein search, using sw model

Run on: June 25, 2004, 08:54:16 ; Search time 48 Seconds  
(without alignments)  
2570.230 Million cell updates/sec

Title: US-09-103-287-2

Perfect score: 2283

Sequence: 1 MHHYFVGKSGMSLAQI.....GDIQLQAYLKGKGNNAF 437

Scoring table: BLOSUM62  
Gapop 10.0 , Gapext 0.5

Searched: 1163542 seqs, 282313646 residues

Total number of hits satisfying chosen parameters: 1163542

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : Published Applications AA:\*

- 1: /cgn2\_6/ptodata/1/pubppa/US07\_PUBCOMB.pep.\*
- 2: /cgn2\_6/ptodata/1/pubppa/PCT\_NEW\_PUB.pep.\*
- 3: /cgn2\_6/ptodata/1/pubppa/US06\_NEW\_PUB.pep.\*
- 4: /cgn2\_6/ptodata/1/pubppa/US06\_PUBCOMB.pep.\*
- 5: /cgn2\_6/ptodata/1/pubppa/US07\_NEW\_PUB.pep.\*
- 6: /cgn2\_6/ptodata/1/pubppa/PCTUS\_PUBCOMB.pep.\*
- 7: /cgn2\_6/ptodata/1/pubppa/US08\_NEW\_PUB.pep.\*
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- 9: /cgn2\_6/ptodata/1/pubppa/US09A\_PUBCOMB.pep.\*
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- 11: /cgn2\_6/ptodata/1/pubppa/US09C\_PUBCOMB.pep.\*
- 12: /cgn2\_6/ptodata/1/pubppa/US09\_NEW\_PUB.pep.\*
- 13: /cgn2\_6/ptodata/1/pubppa/US10A\_PUBCOMB.pep.\*
- 14: /cgn2\_6/ptodata/1/pubppa/US10B\_PUBCOMB.pep.\*
- 15: /cgn2\_6/ptodata/1/pubppa/US10C\_PUBCOMB.pep.\*
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- 17: /cgn2\_6/ptodata/1/pubppa/US60\_NEW\_PUB.pep.\*
- 18: /cgn2\_6/ptodata/1/pubppa/US60\_PUBCOMB.pep.\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

#### SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	2246	98.4	437	9	US-09-815-242-5297 Sequence 5297, Ap
2	2246	98.4	444	9	US-09-815-242-12293 Sequence 12293, A
3	2239	98.1	437	12	US-10-282-122A-43780 Sequence 43780, A
4	2238	98.0	437	9	US-09-925-637-2 Sequence 2, Appli
5	2238	98.0	437	14	US-10-084-205-2 Sequence 2, Appli
6	2238	98.0	437	16	US-10-712-713-2 Sequence 71178, A
7	1952	85.5	437	12	US-10-282-122A-71178 Sequence 46331, A
8	1446	63.3	436	12	US-10-282-122A-46331 Sequence 57306, A
9	1430.5	62.7	445	12	US-10-282-122A-57306 Sequence 10870, A
10	1425.5	62.4	456	9	US-09-815-242-10870 Sequence 57651, A
11	1389	60.8	444	12	US-10-282-122A-57651 Sequence 60988, A
12	1327	58.1	447	12	US-10-282-122A-60988 Sequence 74395, A
13	1131	49.5	442	12	US-10-282-122A-74395 Sequence 72179, A
14	1126.5	49.3	443	12	US-10-282-122A-72179 Sequence 13507, A
15	1107	48.5	444	9	US-09-815-242-13507 Sequence 12993, A

Sequence 74073, A  
Sequence 71315, A  
Sequence 116, App  
Sequence 52628, A  
Sequence 51682, A  
Sequence 53624, A  
Sequence 44665, A  
Sequence 61427, A  
Sequence 66060, A  
Sequence 65124, A  
Sequence 47281, A  
Sequence 63073, A  
Sequence 51373, A  
Sequence 69707, A  
Sequence 5862, Ap  
Sequence 55678, A  
Sequence 50582, A  
Sequence 59579, A  
Sequence 55085, A  
Sequence 76022, A  
Sequence 73039, A  
Sequence 54018, A  
Sequence 76478, A  
Sequence 455, App  
Sequence 10032, A  
Sequence 56416, A  
Sequence 12008, A  
Sequence 66650, A  
Sequence 14079, A  
Sequence 68321, A

#### ALIGNMENTS

#### RESULT 1

US-09-815-242-5297  
; Sequence 5297, Application US/09815242  
; Patent No. US20020061569A1  
; GENERAL INFORMATION:  
; APPLICANT: Haselbeck, Robert  
; APPLICANT: Ohlsen, Kari L.  
; APPLICANT: Zyskind, Judith W.  
; APPLICANT: Wall, Daniel  
; APPLICANT: Trawick, John D.  
; APPLICANT: Carr, Grant J.  
; APPLICANT: Yamamoto, Robert T.  
; APPLICANT: Xu, H. Howard  
; TITLE OF INVENTION: Identification of Essential Genes in Prokaryotes  
; FILE REFERENCE: ELITRA.011A  
; CURRENT APPLICATION NUMBER: US/09/815,242  
; CURRENT FILING DATE: 2001-03-21  
; PRIOR APPLICATION NUMBER: 60/191,078  
; PRIOR FILING DATE: 2000-03-21  
; PRIOR APPLICATION NUMBER: 60/206,848  
; PRIOR FILING DATE: 2000-05-23  
; PRIOR APPLICATION NUMBER: 60/207,727  
; PRIOR FILING DATE: 2000-05-26  
; PRIOR APPLICATION NUMBER: 60/242,578  
; PRIOR FILING DATE: 2000-10-23  
; PRIOR APPLICATION NUMBER: 60/253,625  
; PRIOR FILING DATE: 2000-11-27  
; PRIOR APPLICATION NUMBER: 60/257,931  
; PRIOR FILING DATE: 2000-12-22  
; PRIOR APPLICATION NUMBER: 60/269,308  
; PRIOR FILING DATE: 2001-02-16  
; NUMBER OF SEQ ID NOS: 14110  
; SOFTWARE: FastSeq for Windows Version 4.0  
; SEQ ID NO 5297  
; LENGTH: 437  
; TYPE: PRT  
; ORGNISM: Staphylococcus aureus



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; PRIOR FILING DATE: 2000-09-09
; PRIOR APPLICATION NUMBER: 60/242,578
; PRIOR FILING DATE: 2000-10-23
; PRIOR APPLICATION NUMBER: 60/253,625
; PRIOR FILING DATE: 2000-11-27
; PRIOR APPLICATION NUMBER: 60/257,931
; PRIOR FILING DATE: 2000-12-22
; PRIOR APPLICATION NUMBER: 60/267,636
; PRIOR FILING DATE: 2001-02-09
; PRIOR APPLICATION NUMBER: 60/269,308
; PRIOR FILING DATE: 2001-02-16
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 78614
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 43780
; LENGTH: 437
; TYPE: PRT
; ORGANISM: Staphylococcus aureus
US-10-282-122A-43780

Query Match
Best Local Similarity 98.1%; Score 2239; DB 12; Length 437;
Matches 430; Conservative 2; Mismatches 5; Indels 0; Gaps 0;

QY 1 MTHYHFVGKSGMSLSLAQIMHDLGHEVQSGSDIENVYFTEVALRNKGKIKILPFGANNIKE 60
DB 1 MTHYHFVGKSGMSLSLAQIMHDLGHEVQSGSDIENVYFTEVALRNKGKIKILPFGANNIKE 60
QY 61 DMVVIQGNAPASSHEEIVRAHQKLDVWSYNDFLGQIIDQYTSVAVTGAHGKTSITGLLS 120
DB 61 DMVVIQGNAPASSHEEIVRAHQKLDVWSYNDFLGQIIDQYTSVAVTGAHGKTSITGLLS 120
QY 121 HVNMGDKKTSFLIGDGTGMLPSDYPFAFEACEYRRHFLSKPDYATMTNIDFDPDYFK 180
DB 121 HVNMGDKKTSFLIGDGTGMLPSDYPFAFEACEYRRHFLSKPDYATMTNIDFDPDYFK 180
QY 181 DINDVDFAFQEMAHNVKGIANGDDEHLRKIEADVPYIYGYFKSDSDIYAQNIQITDKG 240
DB 181 DINDVDFAFQEMAHNVKGIANGDDEHLRKIEADVPYIYGYFKSDSDIYAQNIQITDKG 240
QY 241 TAFDVYVDGFFYDFHFLSPQYGDHVTMLNALAVIAISYLEKLDVTNIKEALETFGGVKRRFN 300
DB 241 TAFDVYVDGFFYDFHFLSPQYGDHVTMLNALAVIAISYLEKLDVTNIKEALETFGGVKRRFN 300
QY 301 ETTIANQVIVDDYAHHPREISATIDTARKKYPHKEWAVFQPHTFSTRQAFINEFAESLS 360
DB 301 ETTIANQVIVDDYAHHPREISATIDTARKKYPHKEWAVFQPHTFSTRQAFINEFAESLS 360
QY 361 KADRVFLCEIFGSIENSGALTIQDLIDKIGASFINEDLINVLEQFONAVVLFMGAGDI 420
DB 361 KADRVFLCEIFGSIENSGALTIQDLIDKIGASFINEDLINVLEQFONAVVLFMGAGDI 420
QY 421 QKLQNAVLDKLGKNAF 437
DB 421 QKLQNAVLDKLGKNAF 437

RESULT 4
US-09-925-637-2
; Sequence 2, Application US/09925637
; Patent No. US2002010338A1
; GENERAL INFORMATION:
; APPLICANT: Choi
; TITLE OF INVENTION: Staphylococcus aureus Polynucleotides and Polypeptides
; FILE REFERENCE: PB560
; CURRENT APPLICATION NUMBER: US/09/925,637
; CURRENT FILING DATE: 2001-08-10
; PRIOR APPLICATION NUMBER: PCT/US00/23773
; PRIOR FILING DATE: 2000-08-31
; PRIOR APPLICATION NUMBER: US 60/151,933
; PRIOR FILING DATE: 1999-09-01
; PRIOR APPLICATION NUMBER: US 08/781,986
; PRIOR FILING DATE: 1997-01-03

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; PRIOR APPLICATION NUMBER: US 08/956,171
; PRIOR FILING DATE: 1997-10-20
; PRIOR APPLICATION NUMBER: US 60/009,861
; PRIOR FILING DATE: 1996-01-06
; NUMBER OF SEQ ID NOS: 74
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 2
; LENGTH: 437
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-925-637-2

Query Match
Best Local Similarity 98.0%; Score 2238; DB 9; Length 437;
Matches 429; Conservative 3; Mismatches 5; Indels 0; Gaps 0;

QY 1 MTHYHFVGKSGMSLSLAQIMHDLGHEVQSGSDIENVYFTEVALRNKGKIKILPFGANNIKE 60
DB 1 MTHYHFVGKSGMSLSLAQIMHDLGHEVQSGSDIENVYFTEVALRNKGKIKILPFGANNIKE 60
QY 61 DMVVIQGNAPASSHEEIVRAHQKLDVWSYNDFLGQIIDQYTSVAVTGAHGKTSITGLLS 120
DB 61 DMVVIQGNAPASSHEEIVRAHQKLDVWSYNDFLGQIIDQYTSVAVTGAHGKTSITGLLS 120
QY 121 HVNMGDKKTSFLIGDGTGMLPSDYPFAFEACEYRRHFLSKPDYATMTNIDFDPDYFK 180
DB 121 HVNMGDKKTSFLIGDGTGMLPSDYPFAFEACEYRRHFLSKPDYATMTNIDFDPDYFK 180
QY 181 DINDVDFAFQEMAHNVKGIANGDDEHLRKIEADVPYIYGYFKSDSDIYAQNIQITDKG 240
DB 181 DINDVDFAFQEMAHNVKGIANGDDEHLRKIEADVPYIYGYFKSDSDIYAQNIQITDKG 240
QY 241 TAFDVYVDGFFYDFHFLSPQYGDHVTMLNALAVIAISYLEKLDVTNIKEALETFGGVKRRFN 300
DB 241 TAFDVYVDGFFYDFHFLSPQYGDHVTMLNALAVIAISYLEKLDVTNIKEALETFGGVKRRFN 300
QY 301 ETTIANQVIVDDYAHHPREISATIDTARKKYPHKEWAVFQPHTFSTRQAFINEFAESLS 360
DB 301 ETTIANQVIVDDYAHHPREISATIDTARKKYPHKEWAVFQPHTFSTRQAFINEFAESLS 360
QY 361 KADRVFLCEIFGSIENSGALTIQDLIDKIGASFINEDLINVLEQFONAVVLFMGAGDI 420
DB 361 KADRVFLCEIFGSIENSGALTIQDLIDKIGASFINEDLINVLEQFONAVVLFMGAGDI 420
QY 421 QKLQNAVLDKLGKNAF 437
DB 421 QKLQNAVLDKLGKNAF 437

RESULT 5
US-10-084-205-2
; Sequence 2, Application US/10084205
; Publication No. US20030049648A1
; GENERAL INFORMATION:
; APPLICANT: Choi, Gil
; TITLE OF INVENTION: 37 Staphylococcus aureus Genes and Polypeptides
; FILE REFERENCE: PB515PI
; CURRENT APPLICATION NUMBER: US/10/084,205
; CURRENT FILING DATE: 2002-02-28
; PRIOR APPLICATION NUMBER: PCT/US00/23773
; PRIOR FILING DATE: 2000-08-31
; PRIOR APPLICATION NUMBER: 60/151,933
; PRIOR FILING DATE: 1999-09-01
; NUMBER OF SEQ ID NOS: 74
; SOFTWARE: PatentIn Ver. 3.1
; SEQ ID NO 2
; LENGTH: 437
; TYPE: PRT
; ORGANISM: Staphylococcus aureus
US-10-084-205-2

Query Match
Best Local Similarity 98.0%; Score 2238; DB 14; Length 437;

```

Matches 429; Conservative 3; Mismatches 5; Indels 0; Gaps 0;

QY 1 MTHYFVGIKSGMSSLAQIMHDLGHEVQGSDDIENYVTFEVALRNKGKILPFGANNIK 60  
Db 1 MTHYFVGIKSGMSSLAQIMHDLGHEVQGSDDIENYVTFEVALRNKGKILPFGANNIK 60

QY 61 DMVVIQGNFASSEEIVRAHQKLDVVSYNDFLGQIIDQYTSVAVTGAHGKTTTGLLS 120  
Db 61 DMVVIQGNFASSEEIVRAHQKLDVVSYNDFLGQIIDQYTSVAVTGAHGKTTTGLLS 120

QY 121 HVMGDKKTSFLIGDGTGMGLPESDYFAFACETRHRHFLSKPDYAIMTINIDFHPDYFK 180  
Db 121 HVMGDKKTSFLIGDGTGMGLPESDYFAFACETRHRHFLSKPDYAIMTINIDFHPDYFK 180

QY 181 DINDVDFAFQEMAHNVKGIILAWGDDHRLKIEADVPPIYYGFKSDSDIYAQNIQITDKG 240  
Db 181 DINDVDFAFQEMAHNVKGIILAWGDDHRLKIEADVPPIYYGFKSDSDIYAQNIQITDKG 240

QY 241 TAFDYYVDGEFYDHFSLSPQYGDHVTNLALAVIAISYLEKLDVTNIKEALETFGGVKKRFP 300  
Db 241 TAFDYYVDGEFYDHFSLSPQYGDHVTNLALAVIAISYLEKLDVTNIKEALETFGGVKKRFP 300

QY 301 ETTIANQVIVDDYAHHPREISATIDTARKKYPHKEVAVFQHTFSRTQAFINEFAESLC 360  
Db 301 ETTIANQVIVDDYAHHPREISATIDTARKKYPHKEVAVFQHTFSRTQAFINEFAESLC 360

QY 361 KADRVFLCEIFGSIRESNGALTIDQIDKIGASFINEDLINVLQFONAVLFWAGDI 420  
Db 361 KADRVFLCEIFGSIRESNGALTIDQIDKIGASFINEDLINVLQFONAVLFWAGDI 420

QY 421 OKLQNAVYLDKLGKNAF 437  
Db 421 OKLQNAVYLDKLGKNAF 437

RESULT 6  
US-10-712-713-2  
; Sequence 2, Application US/10712713  
; Publication No. US20040082002A1  
; GENERAL INFORMATION:  
; APPLICANT: Choi, Gil  
; TITLE OF INVENTION: 37 Staphylococcus aureus Genes and Polypeptides  
; FILE REFERENCE: PB515PI  
; CURRENT APPLICATION NUMBER: US/10/712,713  
; CURRENT FILING DATE: 2003-11-14  
; PRIOR APPLICATION NUMBER: US/10/084,205  
; PRIOR FILING DATE: 2002-02-28  
; PRIOR APPLICATION NUMBER: PCT/US00/23773  
; PRIOR FILING DATE: 2000-08-31  
; PRIOR APPLICATION NUMBER: 60/151,933  
; PRIOR FILING DATE: 1999-09-01  
; NUMBER OF SEQ ID NOS: 74  
; SOFTWARE: PatentIn Ver. 3.1  
; SEQ ID NO 2  
; LENGTH: 437  
; TYPE: PRT  
; ORGANISM: Staphylococcus aureus  
US-10-712-713-2

Query Match 98.0%; Score 2238; DB 16; Length 437;  
Best Local Similarity 98.2%; Pred. No. 3.1e-202;  
Matches 429; Conservative 3; Mismatches 5; Indels 0; Gaps 0;

QY 1 MTHYFVGIKSGMSSLAQIMHDLGHEVQGSDDIENYVTFEVALRNKGKILPFGANNIK 60  
Db 1 MTHYFVGIKSGMSSLAQIMHDLGHEVQGSDDIENYVTFEVALRNKGKILPFGANNIK 60

QY 61 DMVVIQGNFASSEEIVRAHQKLDVVSYNDFLGQIIDQYTSVAVTGAHGKTTTGLLS 120  
Db 61 DMVVIQGNFASSEEIVRAHQKLDVVSYNDFLGQIIDQYTSVAVTGAHGKTTTGLLS 120

QY 121 HVMGDKKTSFLIGDGTGMGLPESDYFAFACETRHRHFLSKPDYAIMTINIDFHPDYFK 180  
Db 121 HVMGDKKTSFLIGDGTGMGLPESDYFAFACETRHRHFLSKPDYAIMTINIDFHPDYFK 180

RESULT 7

US-10-282-122A-71178  
; Sequence 71178, Application US/10282122A  
; Publication No. US20040029129A1  
; GENERAL INFORMATION:  
; APPLICANT: Wang, Liangru  
; APPLICANT: Zamudio, Carlos  
; APPLICANT: Malone, Cheryl  
; APPLICANT: Haselbeck, Robert  
; APPLICANT: Ohlsen, Kari  
; APPLICANT: Zyskind, Judith  
; APPLICANT: Wall, Daniel  
; APPLICANT: Trawick, John  
; APPLICANT: Carr, Grant  
; APPLICANT: Yamamoto, Robert  
; APPLICANT: Forsyth, R.  
; APPLICANT: Xu, H.  
; TITLE OF INVENTION: Identification of Essential Genes in Microorganisms  
; FILE REFERENCE: ELITRA 034A  
; CURRENT APPLICATION NUMBER: US/10/282,122A  
; CURRENT FILING DATE: 2003-02-20  
; PRIOR APPLICATION NUMBER: 60/191,078  
; PRIOR FILING DATE: 2000-03-21  
; PRIOR APPLICATION NUMBER: 60/206,848  
; PRIOR FILING DATE: 2000-05-23  
; PRIOR APPLICATION NUMBER: 60/207,727  
; PRIOR FILING DATE: 2000-05-26  
; PRIOR APPLICATION NUMBER: 60/230,335  
; PRIOR FILING DATE: 2000-09-06  
; PRIOR APPLICATION NUMBER: 60/230,347  
; PRIOR FILING DATE: 2000-09-09  
; PRIOR APPLICATION NUMBER: 60/242,578  
; PRIOR FILING DATE: 2000-10-23  
; PRIOR APPLICATION NUMBER: 60/253,625  
; PRIOR FILING DATE: 2000-11-27  
; PRIOR APPLICATION NUMBER: 60/257,931  
; PRIOR FILING DATE: 2000-12-22  
; PRIOR APPLICATION NUMBER: 60/267,636  
; PRIOR FILING DATE: 2001-02-09  
; PRIOR APPLICATION NUMBER: 60/269,308  
; PRIOR FILING DATE: 2001-02-16  
; Remaining Prior Application data removed - See File Wrapper or PALM.  
; NUMBER OF SEQ ID NOS: 78614  
; SOFTWARE: PatentIn version 3.1  
; SEQ ID NO 71178  
; LENGTH: 437  
; TYPE: PRT  
; ORGANISM: Staphylococcus epidermidis  
US-10-282-122A-71178



Query Match	85.5%;	Score	1952;	DB	12;	Length	437;
Best Local Similarity	83.1%;	Pred.	No.	3e-175;			
Matches	363;	Conservative	45;	Mismatches	29;	Indels	0;
							Gaps
							0;
1	MTHYHFVGIKSGMSSLAQIMEDLGHVEQGS	DIENYVFEVALRNKGKILPFGANNIKE	60				
1	MTHYHFVGIKSGMSSLAQIMEDLGHVEQGS	DIENYVFEVALRNKGKILPFGANNITK	60				
61	DMVVIQGNAPASHEEIVRAHQLKDVTYS	INDFLQIIDDQVTSVAVTGAHGKSTTGLLS	120				
61	EMVVIQGNAPONHEEIVRAHEIKLDIKYD	FLGHVINOQVTSVAVTGAHGKSTTGLLS	120				
121	HYVNGDKKTSFLIGDGTGMLPESYFAEAC	EYRRHFLSYKPOVAIMTNDIDFHPDYFK	180				
121	HYVNGDKKTSFLIGDGTGMLPGSDYFAEA	EYRRHFLSYHPDYAIMTNDIDFHPDYFK	180				
181	QINDVFDAFQEMAHNVKKGIIANGDDHL	RKTEADVPYIYQFKSDDOIYQAQNTQIDKG	240				
181	NIDVDYDAFQHMALNVKKGIIANGDEYLR	KLDVDIPVYIYQFKETDDIYAKNIQITKG	240				
241	TAFDYYVGGSFYDHFISLPQGDHFTVLA	NTAISYLEKLDVTNKEALETFGGVKRRFN	300				
241	TQFDVYIKGEFYDQFLSPQDGNHINILA	NTAISYLEDMNVNKEALITFGGVKRRFN	300				
301	ETTIANQVIVDDYVAHHPREISATIDTAR	KKYPHKEVVAVFQPHTSRTOAFLENEFAESLC	360				
301	ETKVSQVIVDDYVAHHPREISATIEAR	KKYPOKDVVAVFQPHTSRTOAFLENEFAESLS	360				
361	KADRVFLCEIPGSIRENSGALTIQDLIDK	TGGASFINEDLINVLBQDNVAVLFWAGADI	420				
361	KADQVFLCEIPGSIRENTGDIETIEDLIN	RDTGSLDENSIDVLEKFDNAVILFWAGADI	420				
421	QKLQNAVILDKLGMQNAF		437				
421	OKLLKAYPEKLGKVNDF		437				

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RESULT 8
US-10-282-122A-46331
; Sequence 46331, Application US/10282122A
; Publication NO. US20040029129A1
; GENERAL INFORMATION:
; APPLICANT: Wang, Liangsu
; APPLICANT: Zamudio, Carlos
; APPLICANT: Malone, Cheryl
; APPLICANT: Haselbeck, Robert
; APPLICANT: Ohlsen, Kari
; APPLICANT: Zyskind, Judith
; APPLICANT: Wall, Daniel
; APPLICANT: Trawick, John
; APPLICANT: Carl, Grant
; APPLICANT: Yamamoto, Robert
; APPLICANT: Forsyth, R.
; APPLICANT: Xu, H.
; TITLE OF INVENTION: Identification of Essential Genes in Microorganisms
; FILE REFERENCE: ELITRA.034A
; CURRENT APPLICATION NUMBER: US/10/282,122A
; CURRENT FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: 60/191,078
; PRIOR FILING DATE: 2000-03-21
; PRIOR APPLICATION NUMBER: 60/206,848
; PRIOR FILING DATE: 2000-05-23
; PRIOR APPLICATION NUMBER: 60/207,727
; PRIOR FILING DATE: 2000-05-26
; PRIOR APPLICATION NUMBER: 60/230,335
; PRIOR FILING DATE: 2000-09-06
; PRIOR APPLICATION NUMBER: 60/230,347
; PRIOR FILING DATE: 2000-09-09
; PRIOR APPLICATION NUMBER: 60/242,578
; PRIOR FILING DATE: 2000-10-23
; PRIOR APPLICATION NUMBER: 60/253,625
; PRIOR FILING DATE: 2000-11-27
; PRIOR APPLICATION NUMBER: 60/257,931

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; PRIOR FILING DATE: 2000-12-22
; PRIOR APPLICATION NUMBER: 60/267,636
; PRIOR FILING DATE: 2001-02-09
; PRIOR APPLICATION NUMBER: 60/269,308
; PRIOR FILING DATE: 2001-02-16
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 78614
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 46331
; LENGTH: 436
; TYPE: PRT
; ORGANISM: Bacillus anthracis
US-10-282-122A-46331

Query Match          63.3%; Score 1446; DB 12; Length 436;
Best Local Similarity 63.8%; Pred. No. 1.6e-127;
Matches 275; Conservative 58; Mismatches 98; Indels 0; Gaps 0;

QY      1  MTHYHFVGKIGSGMSSLAQIMHDLGHEVQGSIDIENYVFTEVALRNKGKILPFGANNIKE 63
DB      1  MTVYHFVGKIGTGMSSLAQILHDMKHTVQGSDEYKGFPTQTALERNKISILPFDKSNVKE 60

QY      61  DMVVIQGNAPASHEEETVRAHQLKLDVSVSYNDPLGQIIDQYTSVAVTGAHGKSTTTGLS 120
DB      61  GQVILAGNAPDPTHEETVAAKELNIPVRYHFHGLGDMNQYTSVAVTGAHGKSTTTGLLA 120

QY      121  HVNMGOKKTSFLIGDGTGMGLPESDYPAFACBYRRHFLSYKDYAITMTWIDFHPDYFK 180
DB      121  HVMQGAHPTSYLIGDGTGHGVENSKYFVFACBYRRHFLSYNPDYAITMTWIDFHPDYFT 180

QY      181  DINDVFAPQEMAHNVKGGIANGDDDEHLRKIEADVPILYYGKSDSDIYAQNIQITDKG 240
DB      181  DINDVFSAQEMALQVKGGIITACDDDELOKIQKVPVIFVGEDNDPQARNIQKR TDG 240

QY      241  TAPDVYVDGFYDHFSPQYGDHVTMLNALAVIALSYLEKLDVMTNKSALETTFGVGKRRFN 300
DB      241  TIFDVFNVTNYDTFKITGYGNHSLNALAVIALCHVENVDVEAVGHOLITTFEGVKRRFN 300

QY      301  ETTIANQVIVDDYAHHPREISATIDTARKKYPKHEVAVPQHPFSTRQAFINEFAESLC 360
DB      301  EKPMEGQVIVDDYAHHPTEINATTEAARQKHPEREIVAVPQHPFSTRTEKEFDEFESLS 360

QY      361  KADRVFELCEFGSIRENSGALTIQOLIDKIGCASFINEDLNLVLEQFDNAVVLFWAGDI 420
DB      361  KADQVYICLDIFGSRNKGELTIEDLQKRIDGAEILITDTTDLVKKKHKNVLLFWAGDI 420

QY      421  QKLQNAVILDKL 431
DB      421  OKFEAAVYKEV 431

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RESULT 9
US-10-282-122A-57306
; Sequence 57306, Application US/10282122A
; Publication No. US20040029129A1
; GENERAL INFORMATION:
; APPLICANT: Wang, Liangsu
; APPLICANT: Zamudio, Carlos
; APPLICANT: Malone, Cheryl
; APPLICANT: Haselbeck, Robert
; APPLICANT: Ohlsen, Kari
; APPLICANT: Zyskind, Judith
; APPLICANT: Wall, Daniel
; APPLICANT: Trawick, John
; APPLICANT: Carr, Grant
; APPLICANT: Yamamoto, Robert
; APPLICANT: Forsyth, R.
; APPLICANT: Xu, H.
; TITLE OF INVENTION: Identification of Essential Genes in Microorganisms
; FILE REFERENCE: ELITRA.034A
; CURRENT APPLICATION NUMBER: US/10/282,122A
; CURRENT FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: 60/191,078

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; APPLICANT: Wall, Daniel
; APPLICANT: Truick, John D.
; APPLICANT: Carr, Grant J.
; APPLICANT: Yamamoto, Robert T.
; APPLICANT: Xu, H. Howard
; TITLE OF INVENTION: Identification of Essential Genes in
; FILE REFERENCE: ELITRA.011A
; CURRENT FILING DATE: 2001-03-21
; PRIOR APPLICATION NUMBER: 60/191,078
; PRIOR FILING DATE: 2000-03-21
; PRIOR APPLICATION NUMBER: 60/206,848
; PRIOR FILING DATE: 2000-05-23
; PRIOR APPLICATION NUMBER: 60/207,727
; PRIOR FILING DATE: 2000-05-26
; PRIOR APPLICATION NUMBER: 60/242,578
; PRIOR FILING DATE: 2000-10-23
; PRIOR APPLICATION NUMBER: 60/253,625
; PRIOR FILING DATE: 2000-11-27
; PRIOR APPLICATION NUMBER: 60/257,931
; PRIOR FILING DATE: 2000-12-22
; PRIOR APPLICATION NUMBER: 60/269,308
; PRIOR FILING DATE: 2001-02-16
; NUMBER OF SEQ ID NOS: 14110
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 10870
; LENGTH: 456
; TYPE: PRT
; ORGANISM: Enterococcus faecalis
; US-09-815-242-10870

Query Match 62.4%; Score 1425.5; DB 9; Length 456;
Best Local Similarity 61.2%; Pred. No. 1.5e-125;
Matches 260; Conservative 73; Mismatches 91; Indels 1; Gaps 1;

QY 4 YHFGVKGSGMSLAQIMHDLGHEVGSQDIENVVTEVALRNKGIKILPFGANNIKEDMV 63
DB 20 YHFGVKGSGMSLAQIMHDLGHEVGSQDIENVVTEVALRNKGIKILPFGANNIKEDMI 79

QY 64 VIQGNFASHEIIVRAHQKLDVSVNDFLQIIOYTSVAVTGAGHKTSITGLSHVM 123
DB 80 VIQGNFASHEIIVRAHQKLDVSVNDFLQIIOYTSVAVTGAGHKTSITGLSHVM 139

QY 124 NGDKTSFLIGDGTGMLPESDYFAFEACEYRRHFLSKYKDYAIMTNIDPDHDPYKDI 183
DB 140 NGDKTSFLIGDGTGMLPESDYFAFEACEYRRHFLSKYKDYAIMTNIDPDHDPYKDI 199

QY 184 DVFDQFQMAHNVKGGIANGDDHLEKIEADVPYIYGFKDSDDIYAQNIQITDKGTAF 243
DB 200 DVFDQFQMAHNVKGGIANGDDHLEKIEADVPYIYGFKDSDDIYAQNIQITDKGTAF 259

QY 244 DVYVDGEFYDHFSLPOYGDHVTNLALAVIAISYLEKLDVTNIXEALTEFGVKRRFNETT 303
DB 260 DVYVDGEFYDHFSLPOYGDHVTNLALAVIAISYLEKLDVTNIXEALTEFGVKRRFNETT 319

QY 304 IANQVIVDDYAHHPREISATIDTARKKYPHKEVAVFQPHFTSTQAFLEPFAESLCKAD 363
DB 320 IANQVIVDDYAHHPREISATIDTARKKYPHKEVAVFQPHFTSTQAFLEPFAESLCKAD 379

QY 364 RVFLCEIFGSIRESNGALTQDLIDKI-GGASFINEDLINVLEQFDNAVLFMGAGDIQK 422
DB 380 RVFLCEIFGSIRESNGALTQDLIDKI-GGASFINEDLINVLEQFDNAVLFMGAGDIQK 439

QY 423 LQNAV 427
DB 440 FEQAY 444

RESULT 11
US-10-282-122A-57651
; Sequence 57651, Application US/10282122A
; Publication No. US20040029129A1

; PRIOR FILING DATE: 2000-03-21
; PRIOR APPLICATION NUMBER: 60/206,848
; PRIOR FILING DATE: 2000-05-23
; PRIOR APPLICATION NUMBER: 60/207,727
; PRIOR FILING DATE: 2000-05-26
; PRIOR APPLICATION NUMBER: 60/230,335
; PRIOR FILING DATE: 2000-09-06
; PRIOR APPLICATION NUMBER: 60/230,347
; PRIOR FILING DATE: 2000-09-09
; PRIOR APPLICATION NUMBER: 60/242,578
; PRIOR FILING DATE: 2000-13-23
; PRIOR APPLICATION NUMBER: 60/253,625
; PRIOR FILING DATE: 2000-11-27
; PRIOR APPLICATION NUMBER: 60/257,931
; PRIOR FILING DATE: 2000-12-22
; PRIOR APPLICATION NUMBER: 60/267,636
; PRIOR FILING DATE: 2001-02-09
; PRIOR APPLICATION NUMBER: 60/269,308
; PRIOR FILING DATE: 2001-02-16
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 78614
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 57306
; LENGTH: 445
; TYPE: PRT
; ORGANISM: Enterococcus faecalis
; US-10-282-122A-57306

Query Match 62.7%; Score 1430.5; DB 12; Length 445;
Best Local Similarity 61.4%; Pred. No. 4.8e-126;
Matches 261; Conservative 73; Mismatches 90; Indels 1; Gaps 1;

QY 4 YHFGVKGSGMSLAQIMHDLGHEVGSQDIENVVTEVALRNKGIKILPFGANNIKEDMV 63
DB 9 YHFGVKGSGMSLAQIMHDLGHEVGSQDIENVVTEVALRNKGIKILPFGANNIKEDMI 69

QY 64 VIQGNFASHEIIVRAHQKLDVSVNDFLQIIOYTSVAVTGAGHKTSITGLSHVM 123
DB 69 VIQGNFASHEIIVRAHQKLDVSVNDFLQIIOYTSVAVTGAGHKTSITGLSHVM 128

QY 124 NGDKTSFLIGDGTGMLPESDYFAFEACEYRRHFLSKYKDYAIMTNIDPDHDPYKDI 183
DB 129 NGDKTSFLIGDGTGMLPESDYFAFEACEYRRHFLSKYKDYAIMTNIDPDHDPYKDI 188

QY 184 DVFDQFQMAHNVKGGIANGDDHLEKIEADVPYIYGFKDSDDIYAQNIQITDKGTAF 243
DB 189 DVFDQFQMAHNVKGGIANGDDHLEKIEADVPYIYGFKDSDDIYAQNIQITDKGTAF 248

QY 244 DVYVDGEFYDHFSLPOYGDHVTNLALAVIAISYLEKLDVTNIXEALTEFGVKRRFNETT 303
DB 249 DVYVDGEFYDHFSLPOYGDHVTNLALAVIAISYLEKLDVTNIXEALTEFGVKRRFNETT 308

QY 304 IANQVIVDDYAHHPREISATIDTARKKYPHKEVAVFQPHFTSTQAFLEPFAESLCKAD 363
DB 309 IANQVIVDDYAHHPREISATIDTARKKYPHKEVAVFQPHFTSTQAFLEPFAESLCKAD 368

QY 364 RVFLCEIFGSIRESNGALTQDLIDKI-GGASFINEDLINVLEQFDNAVLFMGAGDIQK 422
DB 369 RVFLCEIFGSIRESNGALTQDLIDKI-GGASFINEDLINVLEQFDNAVLFMGAGDIQK 428

QY 423 LQNAV 427
DB 429 FEQAY 433

RESULT 10
US-09-815-242-10870
; Sequence 10870, Application US/09815242
; Patent No. US20020061569A1
; GENERAL INFORMATION:
; APPLICANT: Haselbeck, Robert
; APPLICANT: Ohlsen, Kari L.
; APPLICANT: Zyskind, Judith W.

```

364 RVFLCEIFGSIENGSLTIOQLDKI-GGASFINEDLINVLEQFONAVLFGAGDIQK 422  
 368 KYVLCDFGAREEQNVKIEDLGAKIKKGGEVICKENNSPLLDYHDHVVIFMGAGDVQK 427  
 423 LONAYLDKL 431  
 428 FEQAY-EKL 435

RESULT 12  
 US-10-282-122A-60988  
 ; Sequence 60988, Application US/10282122A  
 ; Publication No. US20040029129A1  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Wang, Liangsu  
 ; APPLICANT: Zamudio, Carlos  
 ; APPLICANT: Malone, Cheryl  
 ; APPLICANT: Haselbeck, Robert  
 ; APPLICANT: Ohlsen, Kari  
 ; APPLICANT: Zyskind, Judith  
 ; APPLICANT: Wall, Daniel  
 ; APPLICANT: Trawick, John  
 ; APPLICANT: Carr, Grant  
 ; APPLICANT: Yamamoto, Robert  
 ; APPLICANT: Forsyth, R.  
 ; APPLICANT: Xu, H.  
 ; TITLE OF INVENTION: Identification of Essential Genes in Microorganisms  
 ; FILE REFERENCE: ELITRA.034A  
 ; CURRENT APPLICATION NUMBER: US/10/282,122A  
 ; CURRENT FILING DATE: 2003-02-20  
 ; PRIOR APPLICATION NUMBER: 60/191,078  
 ; PRIOR FILING DATE: 2000-03-21  
 ; PRIOR APPLICATION NUMBER: 60/206,848  
 ; PRIOR FILING DATE: 2000-05-23  
 ; PRIOR APPLICATION NUMBER: 60/207,727  
 ; PRIOR FILING DATE: 2000-05-26  
 ; PRIOR APPLICATION NUMBER: 60/230,335  
 ; PRIOR FILING DATE: 2000-09-06  
 ; PRIOR APPLICATION NUMBER: 60/230,347  
 ; PRIOR FILING DATE: 2000-09-09  
 ; PRIOR APPLICATION NUMBER: 60/242,578  
 ; PRIOR FILING DATE: 2000-10-23  
 ; PRIOR APPLICATION NUMBER: 60/253,625  
 ; PRIOR FILING DATE: 2000-11-27  
 ; PRIOR APPLICATION NUMBER: 60/257,931  
 ; PRIOR FILING DATE: 2001-02-09  
 ; PRIOR APPLICATION NUMBER: 60/269,308  
 ; PRIOR FILING DATE: 2001-02-16  
 ; Remaining Prior Application data removed - See File Wrapper or PALM.  
 ; NUMBER OF SEQ ID NOS: 78614  
 ; SOFTWARE: PatentIn version 3.1  
 ; SEQ ID NO 60988  
 ; LENGTH: 447  
 ; TYPE: PRT  
 ; ORGANISM: Listeria monocytogenes  
 ; US-10-282-122A-60988

Query Match 58.1%; Score 1327; DB 12; Length 447;  
 Best Local Similarity 59.3%; Pred. No. 2.8e-116; Indels C; Gaps 0;  
 Matches 253; Conservative 64; Mismatches 110;

1 MTHVHFVGIKSGMSLAQIMHDLGHEVQGSDIENYVTFEVALRNKGKILPFGANNIKE 60  
 1 MTIHFVGIKSGMSLAQILDKGFGVQGSVDVKYFTOKALSEKQIPIMTFSGADNIQ 60  
 61 DMVVIQGNAPASSHEEIVRAHQKLDVSVNDFLQGIIDQYTSVAVTGAHGTSTGLLS 120  
 61 GLTIAGNAPDPDTHETHEIERALELGLSVIRVHKFLQGLIDGYTSIAITGSHGKISTGLLS 120  
 121 HVMNGDKXTSLIGDGTGMLPESDYFAFEACEYRRHFLSVKPDYAIMTNIDFDHDPYFK 180

GENERAL INFORMATION:  
 ; APPLICANT: Wang, Liangsu  
 ; APPLICANT: Zamudio, Carlos  
 ; APPLICANT: Malone, Cheryl  
 ; APPLICANT: Haselbeck, Robert  
 ; APPLICANT: Ohlsen, Kari  
 ; APPLICANT: Zyskind, Judith  
 ; APPLICANT: Wall, Daniel  
 ; APPLICANT: Trawick, John  
 ; APPLICANT: Carr, Grant  
 ; APPLICANT: Yamamoto, Robert  
 ; APPLICANT: Forsyth, R.  
 ; APPLICANT: Xu, H.  
 ; TITLE OF INVENTION: Identification of Essential Genes in Microorganisms  
 ; FILE REFERENCE: ELITRA.034A  
 ; CURRENT APPLICATION NUMBER: US/10/282,122A  
 ; CURRENT FILING DATE: 2003-02-20  
 ; PRIOR APPLICATION NUMBER: 60/191,078  
 ; PRIOR FILING DATE: 2000-03-21  
 ; PRIOR APPLICATION NUMBER: 60/206,848  
 ; PRIOR FILING DATE: 2000-05-23  
 ; PRIOR APPLICATION NUMBER: 60/207,727  
 ; PRIOR FILING DATE: 2000-05-26  
 ; PRIOR APPLICATION NUMBER: 60/230,335  
 ; PRIOR FILING DATE: 2000-09-06  
 ; PRIOR APPLICATION NUMBER: 60/230,347  
 ; PRIOR FILING DATE: 2000-09-09  
 ; PRIOR APPLICATION NUMBER: 60/242,578  
 ; PRIOR FILING DATE: 2000-10-23  
 ; PRIOR APPLICATION NUMBER: 60/253,625  
 ; PRIOR FILING DATE: 2000-11-27  
 ; PRIOR APPLICATION NUMBER: 60/257,931  
 ; PRIOR FILING DATE: 2000-12-22  
 ; PRIOR APPLICATION NUMBER: 60/267,636  
 ; PRIOR FILING DATE: 2001-02-09  
 ; PRIOR APPLICATION NUMBER: 60/269,308  
 ; PRIOR FILING DATE: 2001-02-16  
 ; Remaining Prior Application data removed - See File Wrapper or PALM.  
 ; NUMBER OF SEQ ID NOS: 78614  
 ; SOFTWARE: PatentIn version 3.1  
 ; SEQ ID NO 57651  
 ; LENGTH: 444  
 ; TYPE: PRT  
 ; ORGANISM: Enterococcus faecium  
 ; US-10-282-122A-57651

Query Match 60.8%; Score 1389; DB 12; Length 444;  
 Best Local Similarity 61.1%; Pred. No. 3.9e-122;  
 Matches 262; Conservative 68; Mismatches 97; Indels 2; Gaps 2;

4 YHFVGIKSGMSLAQIMHDLGHEVQGSDIENYVTFEVALRNKGKILPFGANNIKE 63  
 8 YHFVGIKSGMSLAQILVLEHQLNVOGSDIEKYFTQDLEKANIITLFPNADNVKPGMT 67  
 64 VTQGNAPASSHEEIVRAHQKLDVSVNDFLQGIIDQYTSVAVTGAHGTSTGLLSHYM 123  
 68 ILIAGNAPDPDTHETHEIERALELGLSVIRVHKFLQGLIDGYTSIAITGSHGKISTGLLSHWL 127  
 124 NGDKXTSLIGDGTGMLPESDYFAFEACEYRRHFLSVKPDYAIMTNIDFDHDPYFKDIN 183  
 128 SGVRPSTSLIGDGTGMDGDPQAEFEACEYRRHFLAYSDDYAIMTNIDFDHDPYTSID 187  
 184 DVFDAPQEAHNVKGGIAGWDDEHLRKIEADVPYIYYGPKSDSDIYAQMIQITDKGTAF 243  
 188 DVTAQTWAGQVKKAFAYGDDAYLRKLANVPYIYYGVTEENDEIQARNIERTSSAF 247  
 244 DVTVGDFYDHFSLSPQGDHVTMLALAVTALSYLEKLDVNIKEALETFGCVKRRNEIT 303  
 248 DVYHGEFVGHFTVPFAGKKNILNALGVIAVAYPEKLDLKEVAEMUTFCVKKRFSSEKI 307  
 304 IANQVIVDVAHPREISATIDTARKKYPHKEVVAVFPQHTFSRTOAFLNEFAESLCKAD 363  
 308 VADMVTVVDVYAHHPAEIKATIDGARQKYPDKELIIVFPQHTFTTIALMDFAEALDLAD 367

Db 121 HVGAIPTSLVIGDGTGCTDAEYFALEACEYQHFALVAKPYAIVNINWDHPDYFK 180  
Qy 181 DINDVDFAPQMAHNVKGIITAWGDEHLKIEADVPYIYGGFKSDDIYAQNIQITDKG 240  
Db 181 SVDDVFENAFETLQKQKAVFALGDDAELRLKLTLDIPYIFGFGEEENFQAKVNIKTTG 240  
Qy 241 TAFDVTGGEYDFHLSPOYGDHTVNLALAVIAISYLEKLDVTNIKEALETFGGVKKRFN 300  
Db 241 TKFDVYHREELSSFEIYAGDHNINLALSVIALCDYGLPVEDVYNELKTFEGVKKRFS 300  
Qy 301 ETTTANQVIVDYAHHPREISATIDTARKKYPHKEVAVFQPHTPSRTOAFINFAESLC 360  
Db 301 ITEXGNQVIVDYAHHPREISATIDTARKKYPHKEVAVFQPHTPSRTOAFINFAESLC 360  
Qy 361 KADRVLCIFGSIENSALTIOQLDKIGASFINEDLNLVQFDNAVVLFWGAGDI 420  
Db 361 LADEVYLCDFIGSAREKTNLTADLAHKTGNHIIKEHTBELLKYPEAVILFWGAGDV 420  
Qy 421 QKQNAV 427  
Db 421 QKQNAV 427

RESULT 13  
US-10-282-122A-74395  
; Sequence 74395, Application US/10282122A  
; Publication No. US20040029129A1  
; GENERAL INFORMATION:  
; APPLICANT: Wang, Liangsu  
; APPLICANT: Zamudio, Carlos  
; APPLICANT: Malone, Cheryl  
; APPLICANT: Haselbeck, Robert  
; APPLICANT: Ohlsen, Kari  
; APPLICANT: Zyskind, Judith  
; APPLICANT: Wall, Daniel  
; APPLICANT: Trawick, John  
; APPLICANT: Carr, Grant  
; APPLICANT: Yamamoto, Robert  
; APPLICANT: Forsyth, R.  
; TITLE OF INVENTION: Identification of Essential Genes in Microorganisms  
; FILE REFERENCE: ELITRA.034A  
; CURRENT APPLICATION NUMBER: US/10/282,122A  
; CURRENT FILING DATE: 2003-02-20  
; PRIOR APPLICATION NUMBER: 60/191,078  
; PRIOR FILING DATE: 2000-03-21  
; PRIOR APPLICATION NUMBER: 60/206,848  
; PRIOR FILING DATE: 2000-05-23  
; PRIOR APPLICATION NUMBER: 60/207,727  
; PRIOR FILING DATE: 2000-05-26  
; PRIOR APPLICATION NUMBER: 60/230,335  
; PRIOR FILING DATE: 2000-09-06  
; PRIOR APPLICATION NUMBER: 60/230,347  
; PRIOR FILING DATE: 2000-09-09  
; PRIOR APPLICATION NUMBER: 60/242,578  
; PRIOR FILING DATE: 2000-10-23  
; PRIOR APPLICATION NUMBER: 60/253,625  
; PRIOR FILING DATE: 2000-11-27  
; PRIOR APPLICATION NUMBER: 60/257,931  
; PRIOR FILING DATE: 2000-12-22  
; PRIOR APPLICATION NUMBER: 60/267,636  
; PRIOR FILING DATE: 2001-02-09  
; PRIOR APPLICATION NUMBER: 60/269,308  
; PRIOR FILING DATE: 2001-02-16  
; Remaining Prior Application data removed - See File Wrapper or PALM.  
; NUMBER OF SEQ ID NOS: 78614  
; SOFTWARE: PatentIn version 3.1  
; SEQ ID NO 74395  
; LENGTH: 442  
; TYPE: PRT  
; ORGANISM: Streptococcus pyogenes  
US-10-282-122A-74395

Query Match 49.5%; Score 1131; DB 12; Length 442;  
Best Local Similarity 50.9%; Pred. No. 8.6e-98;  
Matches 219; Conservative 77; Mismatches 132; Indels 2; Gaps 2;  
Qy 4 YHFCIKSGSSLAQIMHDLGHEVQSDIENNVFTEVALRNKGIKILPFGANNIKEDMV 63  
Db 5 YHFIGIKSGMSALMLHQMKGHKVQGSDEYKXYTQRCLEQAGITILPFSDDNITPDME 64  
Qy 64 VTQGNFASFSSHEEIVRAHQQLKLDVVSYNDFLGQIIDDQYTSVAVTGANGKTSTTGLLSHYM 123  
Db 65 LIVGNFARNKNEKAVALARHQIPEKRYHDFLGDPMKSFISFAVAGARGKTSTTGLLSHYL 124  
Qy 124 NGDKKTSFLIGGTGMLPESDYPAFAECYERHFLSYKPDYALMTNIDFDPDYKEDIN 183  
Db 125 KNITDTSVLIGGTGGRGSANAQYFVPESEYERHEFVPEHPSYIINIDFDPDYFTGIA 184  
Qy 184 DYDFADPQMAHNVKGIITAWGDEHLKIEADVPYIYGGFKSDDIYAQNIQITDKGTAF 243  
Db 185 DVNRAFNDYAKQVKALFVGGDEDLKKEAPAPIYIYGGFEGNDFIAYDITRTTNGSDF 244  
Qy 244 DVIYDGEFYDFHLSPOYGDHTVNLALAVIAISYLEKLDVTNIKEALETFGGVKKRFN 303  
Db 245 KVKHGEVIGQFHVPAYGKHNILNATAVIANLFWAGIDMALVADHLKTFSGVKKRFTTEKI 304  
Qy 304 IANQVIVDYAHHPREISATIDTARKKYPHKEVAVFQPHTPSRTOAFINFAESLC 363  
Db 305 INDTIIDDFAHPTTEIVATIDAAKQYKESKEIYALFQPHTPRTTALDEDFACALNEAD 364  
Qy 364 RVFLCEIFGSIRE-NSGALTIQDLIDK-IGGASFINEDLNLVQFDNAVVLFWGAGDIQ 421  
Db 365 SVYLAQIYGSAREVDKGEVKVEDLAALKIKPSQVVTVENVSPLLDHDNAVYVFWGAGDIQ 424  
Qy 422 KQNAVYDKL 431  
Db 425 LYHSPFEELL 434  
RESULT 14  
US-10-282-122A-72179  
; Sequence 72179, Application US/10282122A  
; Publication No. US20040029129A1  
; GENERAL INFORMATION:  
; APPLICANT: Wang, Liangsu  
; APPLICANT: Zamudio, Carlos  
; APPLICANT: Malone, Cheryl  
; APPLICANT: Haselbeck, Robert  
; APPLICANT: Ohlsen, Kari  
; APPLICANT: Zyskind, Judith  
; APPLICANT: Wall, Daniel  
; APPLICANT: Trawick, John  
; APPLICANT: Carr, Grant  
; APPLICANT: Yamamoto, Robert  
; APPLICANT: Forsyth, R.  
; APPLICANT: Xu, H.  
; TITLE OF INVENTION: Identification of Essential Genes in Microorganisms  
; FILE REFERENCE: ELITRA.034A  
; CURRENT APPLICATION NUMBER: US/10/282,122A  
; CURRENT FILING DATE: 2003-02-20  
; PRIOR APPLICATION NUMBER: 60/191,078  
; PRIOR FILING DATE: 2000-03-21  
; PRIOR APPLICATION NUMBER: 60/206,848  
; PRIOR FILING DATE: 2000-05-23  
; PRIOR APPLICATION NUMBER: 60/207,727  
; PRIOR FILING DATE: 2000-05-26  
; PRIOR APPLICATION NUMBER: 60/230,335  
; PRIOR FILING DATE: 2000-09-06  
; PRIOR APPLICATION NUMBER: 60/230,347  
; PRIOR FILING DATE: 2000-09-09  
; PRIOR APPLICATION NUMBER: 60/242,578  
; PRIOR FILING DATE: 2000-10-23  
; PRIOR APPLICATION NUMBER: 60/253,625  
; PRIOR FILING DATE: 2000-11-27

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; PRIOR APPLICATION NUMBER: 60/257,931
; PRIOR FILING DATE: 2000-12-22
; PRIOR APPLICATION NUMBER: 60/267,636
; PRIOR FILING DATE: 2001-02-09
; PRIOR APPLICATION NUMBER: 60/269,308
; PRIOR FILING DATE: 2001-02-16
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 78614
; SOFTWARE: Patent in version 3.1
; SEQ ID NO 72179
; TYPE: PRT
; ORGANISM: Streptococcus mutans
; US-10-282-122A-72179

Query Match      49.3%; Score 1126.5; DB 12; Length 443;
Best Local Similarity 50.9%; Pred. No. 2.3e-97;
Matches 219; Conservative 79; Mismatches 129; Indels 3; Gaps 3;

Qy 5 HFVGIKSGMSSLAQIMHDI GHEVQGS DIENYVTEVALRNKGIKILPFGANNIKEDMVV 64
Db 6 HFTGIKSGMSALALLHQMGKVKQGS DVKYFTQHGLEKAGIPILPFAESNITNDMEI 65

Qy 65 IQGNFAS SHE-ETVRAHQKLDVVS YNDFLQI IDQYTSVAVTGAHGKTSTTGLLSHV 123
Db 66 IAGNAFPKNNIEVAYALENGYHFKRYHEFLGFMNQFTSLGVAGAHGKTSTTGLLAFLV 125

Qy 124 NGDKKTSFLIGDGTGMGLPESDYPAFACEYRRHFLSKYKPDYAIMTIDFDPDYEKDI 182
Db 126 KNIITDTSFLIGDGTGRGLANSQYVFESDEYERHFMYPHPEYSIITNIDFDPDYFTSL 184

Qy 184 DVPDAFOEMAHNVKKGIIANGDDDEHLKIEADVPYIYVGGKSDDIYAQNIQITDKGT 243
Db 186 DVFAAFNDYAKQVKGGLFVYGEDPILKLTSSAIIYVGFKNDDFVAYDIWRSNGSDF 245

Qy 244 DVYVDGEFYDHFHFLSPQVGDHTVLNALAVIAISYLEKLDVTNIKEALETFGVRKRFNE 301
Db 246 KVRGQNELSFFHVPAGRHNVLNATAVIANLYIAGVEMDLVROHLKTFSGVRRFSEKL 305

Qy 304 IANQVIVDDYAHHPREISATIDTAPKYPHKEVAVFOPHTFSCQAFLEPFAESLCKAD 363
Db 306 INDVTIIDDFAHPTTEIATLDAARQKYPSEIYVAIFQPTFTTETIALLDDFAHALNQ 364

Qy 364 RVFLCEIFGSIRE-NSGALTIQDLIDKIGCA-SFINEDLINVLEQFDNAVLFMGAGDIQ 421
Db 366 SVYLAQYIGSAREVDHGDVKVEDLADKLVKPAKVITVDNVSPLLDHDHNAVYVFMGAGD 424

Qy 422 KIQNAYLDKL 431
Db 426 LYERSFPELL 435

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## RESULT 15

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US-09-815-242-13507
; Sequence 13507, Application US/09815242
; Patent No. US20020061569A1
; GENERAL INFORMATION:
; APPLICANT: Haselbeck, Robert
; APPLICANT: Ohlsen, Kari J.
; APPLICANT: Zyskind, Judith W.
; APPLICANT: Wall, Daniel
; APPLICANT: Trawick, John D.
; APPLICANT: Cart, Grant J.
; APPLICANT: Yamamoto, Robert T.
; APPLICANT: Xu, H. Howard
; TITLE OF INVENTION: Identification of Essential Genes in
; FILE REFERENCE: ELITRA 011A
; CURRENT APPLICATION NUMBER: US/09/815,242
; CURRENT FILING DATE: 2001-03-21
; PRIOR APPLICATION NUMBER: 60/191,078
; PRIOR FILING DATE: 2000-03-21
; PRIOR APPLICATION NUMBER: 60/206,848

```

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; PRIOR FILING DATE: 2000-05-23
; PRIOR APPLICATION NUMBER: 60/207,727
; PRIOR FILING DATE: 2000-05-26
; PRIOR APPLICATION NUMBER: 60/242,578
; PRIOR FILING DATE: 2000-10-23
; PRIOR APPLICATION NUMBER: 60/253,625
; PRIOR FILING DATE: 2000-11-27
; PRIOR APPLICATION NUMBER: 60/257,931
; PRIOR FILING DATE: 2000-12-22
; PRIOR APPLICATION NUMBER: 60/269,308
; PRIOR FILING DATE: 2001-02-16
; NUMBER OF SEQ ID NOS: 14110
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 13507
; LENGTH: 444
; TYPE: PRT
; ORGANISM: Streptococcus pneumoniae
; US-09-815-242-13507

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Query Match      48.5%; Score 1107; DB 9; Length 444;
Best Local Similarity 49.8%; Pred. No. 1.6e-95;
Matches 213; Conservative 79; Mismatches 132; Indels 4; Gaps 4;

Qy 4 YHFVGIKSGMSSLAQIMHDI GHEVQGS DIENYVTEVALRNKGIKILPFGANNIKEDMV 63
Db 5 YHFTGIKSGMSALALLHQMGKVKQGS DVKYFTQHGLEKAGITILPFDKNDLGDME 64

Qy 64 VIQGNAF-ASSHEETVRAHQKLDVVS YNDFLQI IDQYTSVAVTGAHGKTSTTGLLSHV 122
Db 65 IAGNAFPKNNIEVAYADQNGISYKRYHEFLGFSFMRDFVSMGVAGAHGKTSTTGLMLSHV 124

Qy 123 MNGDKKTSFLIGDGTGMGLPESDYPAFACEYRRHFLSKYKPDYAIMTIDFDPDYEKDI 182
Db 125 LSHITDTSFLIGDGTGRGSANAKYVFESDEYERHFMYPHPEYSIITNIDFDPDYFTSL 184

Qy 183 NDVPDAFOEMAHNVKKGIIANGDDDEHLKIEADVPYIYVGGK-DSDDIYAQNIQITDKGT 241
Db 185 EDVFNAFNDYAKQITKGLFVYGEDAELKLTSDAPLIYVGFAGENDFVASDLLRSTTGS 244

Qy 242 AFDVYVDGEFYDHFHFLSPQVGDHTVLNALAVIAISYLEKLDVTNIKEALETFGVRKRFNE 301
Db 245 TTFVHFRGNLQGFHIFPFGRENIMNATAVIGLLYTAGFDLNLVREHLKTFAGVRRFTE 304

Qy 302 TTIANQVIVDDYAHHPREISATIDTAPKYPHKEVAVFOPHTFSCQAFLEPFAESLCK 361
Db 305 KIIVNDTVIIDDFAHPTTEIATLDAARQKYPSEIYVAIFQPTFTTETIALLDDFAHALNQ 364

Qy 362 ADRVFLCEIFGSIRE-NSGALTIQDLIDKIGCA-SFINEDLINVLEQFDNAVLFMGAGD 419
Db 365 ADAVYLAQYIGSAREVDHGDVKVEDLANKINKKHQVITVENVSPLLDHDHNAVYVFMGAGD 424

Qy 420 IQKQNAV 427
Db 425 IQTYEVSF 432

```

Search completed: June 25, 2004, 09:01:05  
Job time : 49 secs